

maintaining the data needed, and coincluding suggestions for reducing	ection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu ald be aware that notwithstanding and MB control number.	ion of information. Send comment arters Services, Directorate for Inf	s regarding this burden estimate formation Operations and Reports	or any other aspect of the property of the pro	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE AUG 2000		2. REPORT TYPE		3. DATES COVE 00-07-2000	TRED () to 00-08-2000	
4. TITLE AND SUBTITLE					5a. CONTRACT NUMBER	
Military Review: T 2000	he Professional Jou	rnal of the U.S. Ar	my. July-August	5b. GRANT NUN	MBER	
2000			5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)				5d. PROJECT NU	JMBER	
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
	ZATION NAME(S) AND AE led Arms Center ,Fo	` /	S,66027	8. PERFORMING REPORT NUMB	G ORGANIZATION ER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAIL Approved for publ	.ability statement ic release; distribut	ion unlimited				
13. SUPPLEMENTARY NO	TES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC	ATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	144		

Report Documentation Page

Form Approved OMB No. 0704-0188



Headquarters, Department of the Army
Prepared by
US ARMY COMMAND AND GENERAL STAFF COLLEGE
VOLUME LXXX - July-August 2000, NO 4
Professional Bulletin 100-99-5/6

Now available in Adobe Acrobat (pdf) format

CONTENTS

Editorial PDF

2 Regional Studies

3 Africa's Security Issues Through 2010 PDF by William Thom

12 Threat Kingdom PDF
by Lieutenant Colonel Bill Flynt, US Army

<u>22 Under New Ownership — It's Panama's Canal</u> <u>PDF</u> by Colonel William W. Mendel, US Army, Retired

32 Montenegro's Tribal Legacy PDF by Major Steven C. Calhoun, US Army

41 Mexico's Multimission Force for Internal Security by Graham H. Turbiville, Jr.

50 Grozny 2000: Urban Combat Lessons Learned PDF by Lieutenant Colonel Timothy L. Thomas, US Army, Retired

59 The Second Chechen War: the Information Component by Emil Pain, Former Russian Ethnonational Relations Advisor, as translated by Robert R. Love

70 The Tyranny of Time and Distance: Bridging the Pacific by Lieutenant Colonel Lester W. Grau, US Army, Retired, and Jacob W. Kipp

82 Leadership

83 Chaos, Complexity and the Battlefield PDF by Major Charles A. Pfaff, US Army

87 Technology, Leadership and Effectiveness PDF by Major Christopher D. Kolenda, US Army

Insights PDF

92 Politics is Really Other Things by Edward B. Glick

93 US Army Europe: Deployment Training and Certification by Colonel Robert J. Fulcher Jr., US Army

95 In Search of NATO: The Regional Training Center—Bucharest by Colonel Septimiu N. Caceu, Romanian Army, and Lieutenant Colonel Robert J. Knight, British Army

Almanac PDF

97 The Origin of freie Operationen by MG Dieter Brand, German Army, Retired

100 Under the Gun: Training the AEF, 1917-1918 by Colonel William O. Odom, US Army

106 Book Reviews contemporary readings for the professional PDF

2000 MacArthur Writing Competition Winners PDF

111 Letters to the Editor PDF

C3 CGSC Notes PDF

From the Editor

Despite the talk about sizing the Army for two major theater wars (MTWs), we face internal strategy and resource disconnects—and so do our sister services. In a recent article, Chief of Naval Operations Admiral Jay Johnson and Air Force Chief of Staff General Michael Ryan admitted that neither of their services is a two-MTW force. Not only do US Armed Forces lack resources for the worst-case scenario; post-Cold War operations strain the military day to day. According to Secretary of Defense William Cohen, "We simply cannot carry out the missions that we have with the budget that we have. There is a mismatch. We have more to do and less to do it with, and that is starting to show in wear and tear on people, wear and tear on equipment."

Don't pin your hopes on a new administration, either, because the rest of the world doesn't necessarily plan its bad-hair days around the first Tuesday in November. If you thought the Kosovo operation popped up out of nowhere, hold on to your Kevlar. Just wait until African strife dominates CNN. Imagine that internal conditions in Mexico and Panama deteriorate or that our relationship with China gets worse instead of better. What if Russian fears are realized and Chechen unrest overflows? This regional studies issue offers glimpses of potential trouble-spots that may lie far from Southwest or Southeast Asia—perhaps involving actors far different from traditional militaries or even nation-states.

Don't despair. Text and data mining of even open sources can uncover enemy intentions. Military-to-military cooperation can shore up troubled governments. And should deployment of US forces become necessary, wing-in-ground effect technology may provide a practical alternative to traditional strategic air- and sealift. Our authors offer promising insights and analysis—all you have to do is read what they have developed and then go do the heavy lifting.

Let us hear from you.

Leaders such as retired General Wesley Clark, former Supreme Allied Commander, Europe, have made an important point about the current state of international politics and US military involvement. No one should be nostalgic for "the good old days" spent facing off against a monolithic Soviet threat.

Even if training, readiness and strategy seemed simpler then, the stakes were ghastly. Today's between-wars peace, however uneasy in places like Bosnia, Kosovo and Iraq—however costly in terms of physical and moral resources—beats the alternative. War is no bargain. As the Army looks up and out to deter conflict in places beyond Central Europe, our international perspective has turned upside down and backwards as smaller scale contingencies and asymmetric threats loom around the world.

And right where we live.



Africa's Security Issues Through 2010

William Thom

PROSPECTS FOR AFRICA over the next 10 years hinge on the continent's severe security problems. Peace is the foundation for Africa's future because all goals for development, plans for good governance and alleviation of human suffering depend on a secure and stable environment. South of the Sahara, Africa suffers from a vicious cycle of poverty, which contributes to criminal and political violence that inhibits investment and discourages economic development. One in three sub-Saharan states is currently experiencing some form of military conflict.

Abject poverty is at the root of many African conflicts, and the number of risk takers willing to take up arms to claim their piece of the meager economic pie is growing. The global communications revolution fuels rising expectations, and as Africans realize the depths of their poverty for the first time, they are losing patience with ineffective political leaders and traditional rulers—opportunities for economic advancement are painfully beyond their grasp. Poorly governed states with weak or uncontrollable armies face collapse.

Concern for basic safety is another factor. When a state can no longer protect its citizens, its primary reason to exist ceases; individuals will seek protection elsewhere. Insecurity fans ethnic, religious and regional animosities, even where differences have long been beneath the surface. When all else fails, individuals fall back on their tribal unit, encouraging the rise of warlords, often based on ethnic affiliations.

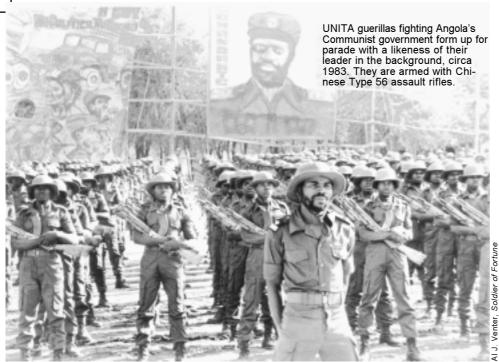
Another major change in Africa's security calculus has occurred in the aftermath of the Cold War: African countries are now setting their own security agendas. After more than 100 years of colonial domination and Cold War distortion, Africans are taking charge of events around the continent. Africans sense a waning security commitment from traditional external powers—their former colonial rulers and Cold War partners.

Abject poverty is at the root of many
African conflicts, and the number of risk takers
willing to take up arms to claim their piece of
the meager economic pie is growing.
The global communications revolution fuels
rising expectations, and as African citizens
realize the depths of their poverty for the first
time, they are losing patience with ineffective
political leaders and traditional ruler.

France's more constrained role recently as the self-styled "gendarme of Africa" is instructive. Paris's unilateral intervention in Rwanda in 1994 brought accusations that France had sided with the Hutu against the Tutsi. Two years later, when long-time French ally Zairian President Mobutu Sese Seko faced a serious rebellion supported by an alliance of regional states, Paris demurred. The inaction sent a message that there were new, more restrictive limits to French intervention in Africa.

Today's African leaders see a new freedom to act militarily. On the positive side, African states are more inclined to take responsibility for solving African security problems. In the post-Cold War era, some 20 countries have participated in peacekeeping and peacemaking operations on the continent, mostly on their own. On the negative side, this new freedom has also fostered military adventures that have complicated regional security problems.

Sub-Saharan Africa's position in the post-Cold War global security constellation is emerging. The continent has unfinished business from the Cold War and even the colonial period. In this land of mostly small internal wars, a limited military investment can potentially yield immense profits. Among the numerous weak states with poor armies and fragile institutions, even a small war can generate great destruction, as in Somalia and Sierra Leone. In 10 years Africa will likely still be at war with itself,



Communist powers poured in troops, advisors and billions of dollars of conventional weaponry in a vain attempt to preserve their perceived strategic gains in these two anchor countries. To balance the ledger, the West provided military assistance to professed anticommunist "freedom fighters" in Angola, and such anti-Marxist bulwarks as Zairian President Mobutu.

continuing the process of nation-building, as relatively strong, stable states survive, and weak, hopelessly fractured ones do not. What follows are some key military themes that will help shape African realities over the next 10 years.

Warfare in the Era of Independence

Since the end of World War II, there have been three identifiable periods of warfare in sub-Saharan Africa. They span the spectrum of combat from guerrilla wars to coalition warfare, but with insurgency as a constant. During this period, an estimated 3.5 million soldiers and civilians have perished in African conflicts. The first period involved wars of liberation against the colonial powers, which extended well into the 1970s. These armed insurgencies against the remaining colonial powers were essentially low-budget, small-scale conflicts backed by communist powers. But, other revolts against colonialism did not align with the communist cause and—at least initially—did not receive significant support from Moscow. Examples from the 1950s and 60s include the Mau Mau revolt in Kenya, the early uprising in Angola and the Eritrean independence struggle. In Southern Africa there were wars of national liberation to end white-dominated settler regimes.

The second period involved the appearance of a few interstate wars and large-scale civil wars that were militarily significant, mostly conventional and

politically galvanizing. By the 1970s a number of African states had developed armies capable of projecting power across their borders. The two best examples of African interstate conflict during this period were the Ogaden War between Ethiopia and Somalia (1977-78), and the Tanzania-Uganda War (1978-79). White-ruled South Africa pursued a forward-defense strategy during the 1970s and 1980s, which resulted in episodic combat with black-ruled states to the north. In Angola, however, Pretoria's apartheid government deployed conventional forces in strength to fight Angolan and Cuban forces. Two pivotal states where communist regimes had come to power in the 1970s-Ethiopia and Angola—faced large-scale civil wars in the 1980s. Communist powers poured in troops, advisors and billions of

dollars of conventional weaponry in a vain attempt to preserve their perceived strategic gains in these two anchor countries. To balance the ledger, the West provided military assistance to professed anticommunist "freedom fighters" in Angola, and such anti-Marxist bulwarks as Zairian President Mobutu.

By the post-Cold War 1990s, however, a third period had emerged, one that points toward the next decade. The significant wars have once again become mainly internal contests fought at the unconventional or semiconventional level, leading to state collapse and wars of intervention. Easy to finance and difficult to defend against, guerrilla warfare—long the bane of Africa—remains its most prevalent form of conflict. Today's vicious insurgencies differ from yesterday's armed liberation movements in motivation: current struggles are based on power and economics, not a political cause or ideology. In weak states with unprofessional, underpaid armies, armed bandits become armed insurgents as they fill the power vacuum.

War in the 1990s became more destructive as internecine conflicts destroyed already fragile infrastructures. Today's African insurgents tend to be better armed and out number their 1960s predecessors. As the distinctions between guerrilla warfare and organized banditry blur, the targets often become the people themselves. Prolonged internal wars can destroy the fabric of the state and the society. On a continent where the majority of the

population is no more than 15 years old, the communications revolution has highlighted the enormous gap between rich and poor. Youth without hope in dysfunctional nation states provide a ready manpower pool for local warlords; elsewhere, children are kidnapped out of villages by roving insurgent bands. The result can be young combatants socialized by an intensely violent right of passage, who begin to see banditry, murder and pillaging as normal behavior.

For African states the present is a time of experimentation with the uses and limits of applying military force. The next 10 to 20 years will bring polarized military power on the subcontinent and a small but growing number of strong states increasingly willing to use military force. Conventional wars will be fought over resources such as oil, other minerals, water and arable land, and to determine regional dominance. Armed insurgency will prevail in many of the weaker states, much as it does

now, with regional powers or power blocs selectively intervening to protect their vital interests, often merely the capital and valuable resources in the interior. Eventually, power blocs will give way to dominant subregional military powers willing to engage in conflict, which will frequently take the form of peace enforcement and counterinsurgency.

An Uneven Balance

Nearly all postcolonial African armies began as colonial adjuncts to European armies and served primarily as tripwire forces in the colonies. As such, they were lightly armed and dependent on their colonial power for training, logistics and leadership. For example, the Kenyan African Rifles descended from the King's African Rifles. Over the past 40 years these armies grew to resemble, on a smaller scale, the forces of their colonial rulers or Cold War patrons.

Throughout this period, there have been great inequities in the military capabilities of African states. Until the mid-1990s, power imbalances have been held in check by the threat of intervention by powers external to Africa. During the Cold War in particular, these external powers intervened militarily to reverse adverse security trends or at least level the playing field. Soviets and Cubans intervened in



On a continent where the majority of the population is no more than 15 years old, the communications revolution has highlighted the enormous gap between rich and poor. Youth without hope in dysfunctional nation states provide a ready manpower pool for local warlords; elsewhere, children are kidnapped out of villages by roving insurgent bands. The result can be young combatants socialized by an intensely violent right of passage, who begin to see banditry, murder and pillaging as normal behavior.

Angola to balance South African intervention in 1975, and France worked to form a posse of African states to save the Mobutu regime in Zaire in 1977 and 1978.

By Western standards, today's African armies are still lightly armed, poorly equipped and trained, and dependent on external military aid. Nevertheless, a growing number of states-notably Nigeria, Angola, South Africa, Uganda, Rwanda, Ethiopia and Zimbabwe-are capable of using military force to pursue their own interests on the continent because of the gross inequities in raw military power. In a conventional scenario a country with a few operational jet fighters or attack helicopters and 30 armored vehicles backed by artillery has an immense advantage over a country that can oppose it with only light infantry units. Without an external or effective regional brake on their activities, emergent local powers can and will take the military option when they believe their vital interests are at stake.

Angola, for example, used its experienced army to intervene once in Congo-Brazzaville and twice in Congo-Kinshasa in the late 1990s to effect outcomes that it perceived as beneficial relative to its struggle with the insurgent Union for the Total Independence of Angola (UNITA). Nigeria managed

to field a force up to division size in Liberia and then in Sierra Leone to pursue regional peace enforcement and its own hegemony in West Africa. Zimbabwe also deployed a division-sized force into the Democratic Republic of Congo (DRC), and South Africa (along with Botswana) sent troops into Lesotho to quell disturbances there. Uganda's

In 10 years Africa will likely still be at war with itself, as it continues the process of nation-building, as relatively strong, stable states survive, and weak, hopelessly fractured ones do not. What follows are some key military themes that will help shape African realities over the next 10 years.

army fought in three neighboring states in the 1990s—Rwanda, Sudan and the DRC. Rwanda has launched its forces into the DRC twice in recent years, and Ethiopia mobilized a force of 250,000 for its border war with Eritrea and continues to pursue hostile elements into the former Somalia.

The next few years promise little change in this military inequity. In 10 to 20 years the gap between the few dominant military powers and the rest of the countries will likely grow exponentially. Among the stronger states, large infantry forces will give way to smaller, more mobile forces with greater reach and firepower. The most capable states will maintain a variety of forces tailored for specific missions such as power projection, peacekeeping, peace enforcement and counterinsurgency. While the best sub-Saharan armies will grow more impressive, they will remain several generations behind the global leaders.

Regional Power Blocs

The original continental organization—the Organization of African Unity (OAU)—organized around the principle of decolonizing Africa. But it did not have a mandate to intervene as a regional military organization or adjudicate military disputes. Thus, in the post-Cold War period continental power blocs have begun to develop and act in conjunction with the OAU. They stem mostly from economic unions, the best example being the Economic Community of West African States and its military arm, the Economic Community of West African States Cease Fire Monitoring Group (ECOMOG). Dominated by regional power Nigeria, ECOMOG has served in Liberia, Sierra Leone and Guinea-Bissau, earning both respect and ridicule. Elsewhere, the Southern Africa Development Community, bolstered by South Africa, has assumed a regional security role, but its unity has been strained by sharp disagreement over Zimbabwe and Namibia's involvement in the DRC. On the Horn of Africa, the Inter-Governmental Authority on Development has engaged in diplomatic conflict resolution in Sudan but lacks any military cooperation among it members. The East African Cooperation—composed of Kenya, Tanzania and Uganda—has conducted joint military exercises. Some groupings appear to be ad hoc and temporary, such as the "Frontline States of East Africa" (Uganda, Ethiopia and Eritrea) which foundered when the Ethiopia-Eritrea border war erupted in 1998. The "Great Lakes Powers" of Uganda, Rwanda and Burundi have acted as an informal bloc in the DRC war, although tensions between Kigali and Kampala resulted in a shout-out at Kisangani in 1999.

Other groupings will likely emerge and some extant groupings rearrange themselves to accommodate changing national interests among members. Power blocs attempt to deal with collective regional security concerns as Africans see themselves increasingly on their own. They see viral forms of economic insurgency and highly destructive internal wars that disregard borders and appear out of control. Responsible leaders band together fearing that these conflicts, left unchecked, could destroy states and create pockets of complete lawlessness. The OAU, by its inaction, encourages the development of such subregional groupings. The OAU has only a token military mechanism, and prefers to endorse military interventions by others rather than take the lead itself. Recently, however, the OAU has shown signs of becoming more active by playing a prominent role in helping negotiate an end to the Ethiopia-Eritrea dispute and by sponsoring a joint military commission in the DRC.

Regional power blocs are only as solvent and effective as the powers that lead them. In sub-Saharan Africa few states are powerful enough to lead now. South Africa and Nigeria are the two best-known military leaders in the sub-Saharan region. Both face severe internal challenges but should maintain their roles as regional powers, and in the long run they have the potential to become continentwide powers. Such a development could lead to recolonization by African powers although the context would be different from the European experience. Pretoria and Abuja, for example, could develop hegemonic tendencies; one could argue that Nigeria already has. Beyond these two countries, predicting other major developing powers is difficult. Among those that could emerge over the next decade or so are Kenya, Angola, Zimbabwe, Ethiopia and perhaps Senegal. Even small countries such as Rwanda and Eritrea have already shown an ability to project force and influence the local military balance.

A proving ground for budding regional powers will be peace enforcement missions and other military interventions in failed states. Peacekeeping may become a lost art in Africa in this century. Namibia and Mozambique have been relative UN successes, but Sierra Leone, Angola, Somalia and Liberia have shown limited returns for expensive peacekeeping ventures. Military interventions in collapsed states will continue, but they are apt to be police actions to ward off insurgents or multinational struggles for resources. The DRC case applies here. The imbalance in military capabilities will not be redressed over the next decade and will likely become more pronounced.

ArmsTradeTrends

Arms acquisition is occurring on three levels—light arms, heavy stock-in-trade items and more sophisticated weapon systems. The extremely active trade in small

arms and other light infantry weapons has captured international attention since the Cold War because they help fuel local wars around the continent. These light weapons include small arms, machineguns, rocket propelled grenade launchers and small-caliber mortars—all man-portable.

These weapons have three principal origins. During the Cold War millions of assault rifles and other firearms were pumped into Africa, mostly by communist powers equipping "allies," notably Angola, Ethiopia, Mozambique, Somalia and Sudan. Rifles such as the AK-47 have become so numerous that they are regarded as a form of currency in some places. Second, in the post-Cold War era a brisk trade has developed, through middlemen, to acquire light arms from the former Soviet Union and other East European countries where such weapons are now cheap and plentiful. Third, a half-dozen or so sub-Saharan states manufacture light arms, and their production far exceeds their own needs.

Small arms are difficult to track, yet one commercial airliner can carry enough of them and their ammunition to start a guerrilla war. That is precisely why the trade in light weapons is so dangerous. The current glut of small arms in Africa should gradually contract over the next 10 to 20 years as the mil-



A half-dozen or so sub-Saharan states manufacture light arms, and their production far exceeds their own needs. Small arms are difficult to track, yet one commercial airliner can carry enough of them and their ammunition to start a guerrilla war. That is precisely why the trade in light weapons is so dangerous. The current glut of small arms in Africa should gradually contract over the next 10 to 20 years as the millions of small arms delivered in the 1970s and 80s age, become unserviceable and are not replaced in such quantities.

lions of small arms delivered in the 1970s and 80s age, become unserviceable and are not replaced in such quantities. Nevertheless, light arms will remain relatively easy to acquire and a major concern.

The trade in heavy weapons and large pieces of military equipment increased in the late 1990s with the growing number of conflicts on the continent and the unprecedented number of countries participating in military operations. Throughout 1998 and 1999 African armies deployed to other African nations 19 times, while 17 countries experienced significant combat on their territory. These deployments included armored vehicles, artillery, surfaceto-air missiles, and combat and transport aircraft. These weapon systems, although not new to the sub-Saharan scene, are now frequently upgraded versions of old classics. The T-55 tank, for example, is now available with reactive armor, night vision equipment and the ability to fire antitank missiles from its main gun. MiG-21 and MiG-23 fighterbombers are now frequently upgraded with better avionics, power plants, weapon suites and other performance enhancements. Other popular items of equipment in the 1990s include infantry fighting vehicles, hand-held surface-to-air missiles, multiple rocket launchers, and combat and transport helicopters—most of Soviet design. The next decade will likely see modest growth in the delivery of heavy weapons to sub-Saharan Africa. Although some observers consider armor and combat aircraft inappropriate for African wars, countries that have recently acquired them are shopping for more. For example, the T-55 is now a prime player in wars from the Horn to Angola, from Rwanda to Guinea. Mi-24 HIND attack helicopters

Most big-ticket purchases still happen through government agencies, and the dollar costs still overwhelmingly favor state-to-state transactions, but the business going to arms peddlers is increasing. This is a troubling development because the independent dealers are motivated strictly by profit, will sell to anyone—insurgents as well as governments—and care little about the consequences.

are popular as a counterinsurgency and close-airsupport platform, and are used by a dozen African countries.

In the late 1990s a new generation of military equipment began to appear in the sub-Saharan region—much of it aviation. The Ethiopia-Eritrea border war has brought Su-27 and MiG-29 fighters, a first for the region. At least a few other countries, such as Angola and Nigeria, will probably acquire these and other new-generation aircraft over next the two to three years. Ethiopia has also received the 2S19 152mm self-propelled artillery system, a quantum leap in sophistication over the post-World War II designed artillery commonly found in Africa. With no Cold War restraints, African countries can successfully seek the next level of sophisticated weaponry.

How can African states afford these arms? The Cold War's military equipment grant aid and easy credit terms are over. The few large or wealthy African countries are understandably in the market for major equipment acquisition. But smaller, poorer countries, driven by perceived threats or the fact that they are already embroiled in a conflict, are also in the arms market. Imaginative financing, such as barter agreements and concessions, makes predictions about who can afford future arms highly speculative.

Black and gray market arms dealers further complicate the scenario as they increasingly replace the classic state-to-state arms deals. Most big-ticket purchases still happen through government agencies, and the dollar costs still overwhelmingly favor state-to-state transactions, but the business going to arms peddlers is increasing. This is a troubling development because the independent dealers are motivated strictly by profit, will sell to anyone—insurgents or governments—and care little about the consequences.

The Question of Privatization

The longstanding reliance on mercenaries will likely continue as African state and substate actors contract out military services to dramatically improve their capabilities. The privatization of state security functions provides African countries with a force multiplier—a cheaper, quicker, albeit controversial, solution for a flagging military. Contractors can be more responsive than states in helping a government. The South African firm Executive Outcomes (EO) was employed effectively in the mid-1990s in both Angola and Sierra Leone and is generally credited with helping to reverse the poor military postures of both governments. EO strayed into operations, however, bringing charges that it was merely a thinly disguised mercenary outfit. The difference between legitimate security contractor and illegal mercenary has blurred. In Africa, mercenaries are a loaded issue, yet many states see contractors as alternatives to Cold War security assistance programs.

State security functions are generally out-sourced in the areas of training, advisory assistance and logistics (maintenance is key deficiency in African militaries). Air transportation has become an especially critical area for privatization. Without contract air transport, many of the recent African engagements would not have been possible. In the current DRC war, air transport is considered the most costly expense for each side.

Security contractors cross the line and become mercenaries when they act as operators and fighters and not just as maintainers and teachers. They cross another line when they begin dealing with substate actors and not recognized governments. Security entrepreneurs may be increasingly willing to sell their services to insurgent movements, tribal militias, local warlords and even nongovernment organizations. While better-known security firmssuch as MPRI and Sandline International—strive to foster a legitimate business image, other lesserknown, spin-off or free-lance groups are concerned only with the bottom line and will deal with just about anyone. It seems likely that private security activities will expand both above board and below. Security vendors selling to substate actors will further destabilize the region.

The new wave of interest in contracting and mercenary services stemmed primarily from arms dealers. When items are sold, package deals include



By Western standards, today's African armies are still lightly armed, poorly equipped and trained, and dependent on external military aid. Nevertheless, a growing number of states—notably Nigeria, Angola, South Africa, Uganda, Rwanda, Ethiopia and Zimbabwe—are capable of using military force to pursue their own interests on the continent because of the gross inequities in raw military power.

trainers, technicians and advisors. From there it is a short leap to providing people to fight. While mercenary combat troops continue to show up occasionally in Africa, the next decade would seem to prize "technomercenaries," technicians who can keep equipment running and train the locals on how to use it, without actually pulling the trigger.

Prospects for Intrastate Wars

African military conflicts since the Cold War have again become almost exclusively internal affairs far more damaging to economic and social underpinnings than traditional interstate wars. The most prevalent forms of conflict in Africa are armed insurgency and civil war, with the latter often growing out of the former. Such unrest seems all but certain to persist over the next 10 years. The conditions that foster the development of economic insurgencies (extreme poverty, large pool of disenfranchised and disaffected youth, ethnic tensions and easy availability of arms) are likely to persist and may intensify. Dissident groups evolve from simple banditry to insurgent warfare as they become larger and

more successful. Credos and manifestos are quickly manufactured to provide a fig leaf of political legitimacy. Eventually, insurgencies may become recognized as civil wars as the rebel chiefs acquire respectability as legitimate political leaders.

Almost all internal wars in Africa attract, or in some cases are created by, the meddling of outside powers. Every insurgency depends at some level on outside assistance, so internal struggles can be viewed as proxy wars disguised as internal conflicts. Weak states are vulnerable to collapse, and internal wars hasten the process. State collapse as defined here is not merely the failure of the machinery of government to work, as in Zaire under Mobutu; it is the complete breakdown of national government authority, as in Somalia under a gaggle of feuding warlords. National control disappears when the rot from within erodes the military to the point that it can no longer serve as the guardian of the state. Ironically, either unwise military downsizing, or worse, unwise rapid military mobilization, can exacerbate internal security problems. Armed groups opposing the government, or merely oriented toward self defense, fill the

Current Conflicts

The DROC Civil War 1998-?

Status: Peace agreement signed, being violated by most signatories.

Type: Coalition civil war with extensive participation by foreign powers and substate actors.

Number of combatants: 120-140,000.

Displaced persons: 290,000.

Significant formations: Battalion, company. Casualties: 20-27,000 (mostly civilian). Tactics: Semiconventional (a mix).

Foreign involvement: Zimbabwe, Angola, Namibia, Chad and Sudan for the government; Rwanda, Uganda and Burundi for the rebels.

Angolan Civil War 1998-?

Status: Lusaka Protocol violated by both sides, ongoing conflict.

Type: Latest phase of long running civil war. **Number of combatants:** 150-180,000.

Displaced persons: over 1.4 million.

Significant formations: Brigade, regiment and battalion.

Casualties: Unknown (mostly civilian).

Tactics: Primarily conventional.

Foreign involvement: Private contract military

assistance (both sides).

Sierra Leone Civil War 1991-?

Status: Peace agreement signed but being violated by rebel signatories.

Type: Brutal insurgency that has evolved into

civil war.

Number of combatants: 30-40,000. Displaced persons: 600,000+.

Significant formations: Battalion and company.

Casualties: over 10,000 (mostly civilian). **Tactics:** Semiconventional (a mix).

Foreign involvement: West African force (headed by Nigeria) transitioning to a UN peace-keeping force for the government; Liberia and private contractors for rebels.

Ethiopia-Eritrea War 1998-?

Status: OAU/UN peace negotiations stalled, temporary lull in fighting.

Type: Large scale border war.
Number of combatants: 400,000.
Displaced persons: over 400,000.

Significant formations: Division, brigade and

battalion.

Casualties: 30-45,000 killed (military).

Tactics: Conventional.

Foreign involvement: Contract personnel on

both sides but primarily in Ethiopia.

void left by receding state power and create ethnic, regional or social networks. In this regard, the expanding number of paramilitaries (armed militias, political factions and ethnic self-defense forces) contributes to instability by increasing the number of armed substate actors with their own agendas. Further, these groups are susceptible to foreign manipulation. This dangerous form of internal warfare, characteristic of the 1990s, will likely be a major problem in Africa throughout the next decade.

It also seems that solvent, functioning African states will selectively intervene militarily to control insurgencies that either threaten neighboring countries or harbor dangerous elements, such as terrorist groups and radical fundamentalist movements. Strong African states and the subregional bodies they dominate will increasingly recognize danger signs such as the subdivision of insurgent forces into warlord gangs, the manipulation of rebel groups by outside interests seeking to capitalize on conflict and the emergence of a criminal empire in a lawless environment. Over the next decade Western powers will recognize that Africa's internal wars which destabilize some states and cause others to collapse, ultimately threaten their strategic interests as well. This lesson is not likely to be driven home, however, until some environmental or criminal disaster strikes that directly threatens Western interests.

Prospects for Interstate Wars

Wars between sovereign states in sub-Saharan Africa have taken place throughout the era of independence, but they have rarely been more than a regional concern. The Ogaden war between Ethiopia and Somalia gained notice because of the involvement of Cuban troops and Soviet advisors, but most interstate conflicts, like the five-day 1985 Christmas war between Mali and Burkina Faso, have been mere footnotes to modern African history. That may well change over the next 10 to 20 years as the militarily strong states attempt to stake out their areas of interest unintimidated by external powers.

A legitimate question is whether African states can afford to participate in interstate military contests. Countries in the Great Lakes region and on the Horn of Africa have shown a surprising and sobering ability to finance current military campaigns. Even in areas where oil, diamonds or other high-priced natural resources are not evident, countries find ways to pay for heavy, modern weapons. Financing African conflicts, especially conventional interstate wars, remains problematic, but the lack of resources is no reason to rule out future interstate wars.

In the sub-Saharan environment, a growing number of states have the raw military capability to engage in interstate wars, even when they do not involve an adjacent country. Contract air transport has

revolutionized warfare in Africa by giving countries strategic reach. Further, many of Africa's new dynamic leaders, such as Ugandan president Yoweri Museveni and Rwandan president Paul Kagame, who came to power by force of arms, tend to view military power as a legitimate—even preferred—tool of statecraft. Additionally, some old-line rulers, such as Angolan president José Eduardo dos Santos and Zimbabwe's president Robert Mugabe, also see flexing military muscle as an acceptable way to do business.

As regional powers become more active in the next decade, and their strategic interests become well defined, occasional interstate wars loom. While intrastate conflicts will remain the principal form of warfare, interstate warfare will be more likely than in the past 40 years. Some conflict may take the form of coalition warfare, such as that now underway in the DRC. Others will be more traditional one-on-one contests such as the Ethiopia-Eritrea war. The battle of wills and principles driving that dispute serve as a reminder that many wars are fought for symbolic and moral purposes. More future interstate wars in Africa are, however, likely to be fought over scarce or vanishing resources—and not just high-value commodities such as oil and diamonds. Water, fisheries, arable land and ethnic solidarity will be among the root causes of interstate wars. Borders established by the colonials will continue to become less relevant and more easily altered by Africa's emerging power structure.

Wars in Africa will stem from acute poverty and a sense of hopelessness among its burgeoning population, especially alienated young men. Fed by rising expectations stemming from increased media exposure, these wars will be primarily internal and unconventional. They will exact a high price on the people, the fragile infrastructures and the foundering states themselves. More states will collapse, be propped up by external powers from within Africa or be patrolled by international peacekeepers.

The disparities in military power on the African continent will become even greater. Emergent local powers and power blocs will be the significant military actors on the continent. As great powers limit their involvement, these emerging powers will pursue their own agendas that by 2010 will change Africa's political map.

The current scope of African military conflict is unprecedented. In the late 1990s sub-Saharan Af-

Almost all internal wars in Africa attract, or in some cases are created by, the meddling of outside powers. Every insurgency depends at some level on outside assistance, so internal struggles can be viewed as proxy wars disguised as internal conflicts.

When items are sold, package deals include trainers, technicians and advisors. From there it is a short leap to providing people to engage in combat. While mercenary combat troops continue to show up, the next decade would seem to prize "technomercenaries," technicians who can keep equipment running and train the locals on how to use it, without actually pulling the trigger.

rica may have entered into a "Thirty Years War," a metamorphic process that will profoundly change the continent. In some corners of Africa, the fires of war will remain difficult to extinguish for another reason: they have gone on for so long that they have attained a sense of normalcy. Entire generations in places such as Angola, Eritrea, Liberia and Somalia have grown up knowing nothing other than war.

In Africa, as elsewhere, transnational criminality and war will become virtually indistinguishable. Economic insurgents, warlords for profit, lawless zones harboring criminals, armies of child soldiers and brutalized civilians will all offend the moral senses of Western nations and seemingly demand a response. Policing these messy situations will become an international priority. Nevertheless, some places will remain beyond the reach of Western moral consciousness and continue to experience low intensity conflict indefinitely.

The next two to three years do not portend much change in African security, but by 2010 Africa's political relief map will likely show stark differences. Islands of stability may be built around relatively strong and prosperous states such as South Africa, Kenya and perhaps Nigeria. In countries riven by insurgency and facing collapse, international forces protecting the capital may in effect create city-states. Elsewhere, local powers will demonstrate hegemonic interests, and geographic boundaries will reflect the continent's new political order. **MR**

William G. Thom is the Defense Intelligence Officer for Africa, Defense Information Agency, Washington DC. He received a B.S. from the State University of New York at New Paltz and an M.A. from American University. He is a graduate of the US Army War College and the National Security Leadership Course. He has held a variety of positions in the DIA, including chief, Africa Military Capabilities Branch; senior analyst, Directorate for Estimates; and Africa analyst, J2. He has also served as senior analyst for Africa, J2, Headquarters, US European Command, Vaihingen, Germany.

Threat Kingdom

Lieutenant Colonel Bill Flynt, US Army

In Greek mythology the gods sometimes punished man by fulfilling his wishes too completely.

— Henry Kissinger

Mr. Gorbachev, tear down this wall.

- Ronald Reagan

E GOT WHAT WE ASKED FOR. Now

we need to adapt.

In a classic article on threat perception written early in the Cold War, J. David Singer defined a threat as a capability coupled with intent.1 He explicitly defined a term he thought was used too loosely in vital security debates at that critical time. His definition remains a basic point of instruction in security studies. Unfortunately, academia's precision has not improved the focus of US post-Cold War security policy. Contemporary security policies declare hunger, civil unrest and other conditions of the security environment as threats. Consequently, the term "threat"-

expanded to mean almost everything—means little. Singer's definition helped security policy planners focus on capabilities when they were measured in time of flight, throw weights and megatons of yield. The intent of the Soviet Union was assumed within models of massive retaliation, deterrence and mutual assured destruction. A key objective of the Cold War's intelligence effort was finding out whether capabilities enabled that intent to become a threat, and if so, how great of a threat. In retrospect, it was a simpler time.

Many things have changed. For instance, despite great effort to describe the current security environment, no recent articulation of US national security strategy equals the coherent vision of former



Kennan's world assumed the intent of specific state actors based on their public declarations and other information. Determining others' capabilities—for example, by counting missile silos—was essential. In today's security environment it is capability that must be assumed.

US State Department Chargé George Kennan for containing the Soviet Union.² It may be too much to expect a similarly elegant vision for protecting US interests in the contemporary security environment. Kennan's world was less complex than the security environment confronting today's strategists. Likely there will be no neat, concise statement of national strategy directing the means and ends of the United States over a long period. Kennan's world was the aberration and his lack of confidence "in the ability of men to define hypothetically in any useful way, by means of general and legal phraseology, future situations which no one [can] really imagine or envisage" may better define our times than his.3

In today's increasingly complex security environment, states are not the only major actors, and technology arms small groups with weapons that in the past were held only by great powers. Technology and the prolif-

eration of knowledge have made biological, radiological, chemical and cyber capabilities available to nonstate actors. Kennan's world assumed the intent of specific state actors based on their public declarations and other information. Determining others' capabilities—for example, by counting missile silos—was essential. In today's security environment it is capability that must be assumed.

Past conventional wisdom that an actor's intent could not be known exaggerated the difficulty because counting missile silos or armored formations was an easier and obvious alternative. In fact, an actor's intent can be known, but it requires much more than counting silos. Unfortunately, given the existing capability of dozens of actors, state and

nonstate, to strike America's critical infrastructure and population with weapons that cannot be counted from space, determining intent is the only remaining option to identify threats.

Watching Them Watch Us

The appearance of weapons of new concepts, and particularly new concepts of weapons, has gradually blurred the face of war.⁴

- Qiao Liang and Wang Xiangsui

Crafting an effective security policy requires understanding three elements: self, environment and

threat (see Figure 1). Understanding self means knowing the ends desired, capabilities possessed, resources available, acceptable courses of action and other aspects. The environment interactively affects both self and threat and can be modeled using core assumptions about its characteristics.5 For example, a common model of the security environment assumes that states are the primary actors; the system is self-help without an overarching authority to referee disputes; survival is the ultimate end; and power, whether measured in terms of economic, military or other instruments, determines rank in the system.⁶ The requirements for knowing oneself and the environment have changed relatively little. Understanding threats, however, has become more difficult.

Key US security officials have documented the capability among dozens of states and other actors to strike the US population and critical infrastructure with a variety of means.⁷ The Cold War environment of clear intentions

but unknown capabilities has changed to one of given capabilities, but unclear intentions. The means of striking the US population and critical infrastructure are no longer limited to strategic nuclear de-

Threat not Countered

RED

BLUE

Policy does not counter Threat

Figure 1. Seeing Red, Gray, and Blue (Understanding Threat, Environment, and Self)

livery systems but now include laptops and even smuggled chemical, biological, nuclear and radiological (CBNR) agents delivered by unwitting commercial carriers on time, on target. Attempting to identify threats based on capabilities has lost some measure of relevance when so many possess the requisite capabilities. Tracking programs for weapons of mass destruction (WMD) is important but increasingly difficult and still does not actually confirm threats. Since trying to track capabilities is nearly futile in a security environment where capabilities are both easily concealed and proliferating

rapidly, assessing intent has become increasingly important.

A common concern is that assessing intent is like mind reading—other actors are opaque entities that may be neutral, friendly or hostile. However, such opaque actors are abstractions found in formal theory's black boxes. Adopting the mistaken belief that intent is unknowable leads one to view another actor as a strange dog encountered on a random walk: will it wag its tail, move along or go for the throat? One knows its capabilities but not its intent. However, usually a great deal is, or could be, known about other actors, particularly states. States' interests, decision-making structure, institutions, track record and key personalities are known with few exceptions. Additionally, states are not opaque to analysis. Bureaucrats, diplomats, military officers, journalists and others can communicate policy directions and provide insight into likely actions. Similarly, nonstate actors also can be analyzed for insight into their

analyzed for insight into their future actions. Intelligence agencies have many tools to gain insight into an actor's intent. One of the newest is the mining of text or data about the actor.

During the Cold War information was more restricted than it is today. Two fundamentals have changed. First, the collapse of the Soviet empire loosed many forces, perhaps the most potent being millions of minds and their voices. The second factor contributing to the information explosion is technology. Freedom of the press worldwide increases information flow as does globalization of television and the exponential growth of the Internet. Ironically, the vastly increased information available has



The means of striking the US population and critical infrastructure are no longer limited to strategic nuclear delivery systems but now include laptops and even smuggled chemical, biological, nuclear and radiological agents delivered by unwitting commercial carriers on time, on target.

not produced better insight. For instance, during the Cold War a public pronouncement by a Soviet official could be relied upon to reflect an official line. Whether it was disinformation or not, they knew we were studying the statement, and we knew they knew. The relative scarcity of information on certain topics made messages about these topics important to study, regardless of accuracy.

One would like to know what potential opponents are thinking. Adolf Hitler's *Mein Kampf* suggests that sometimes threats really do reveal their intent. Some intelligence tools like satellite reconnaissance have limited utility to determine intent, especially when capabilities such as cutting-edge WMD development programs are the target. Likewise, electronic eavesdropping may be deaf to encrypted communications over fiber-optic networks. These collection approaches have the challenge of

obtaining and sorting data. However, a new approach exploits the twin expansions of freedom and technology and can mitigate the effectiveness of technological countermeasures safeguarding threat information, as well as distinguish between data and noise. Protecting all information is impossible, and the expansion of information available increases the probability that important data, even if only in partial form, lies outside protected systems where data-and text-mining technologies can provide qualitative analysis.

Text mining means processing a document through an information-sifting tool. Text-mining tools vary but generally they identify the language of a document, summarize and categorize a document, extract key words, proper names and multiword phrases, report frequency of word and phrase occurrence, statistically rank a document's relevance to a specific topic and glean other information. Some incorporate a web-crawling capability, extract latitude and longitude data, depict information in spatial or temporal relationships, discover linkages or chains of related information, cluster records by like informational content, conduct cross tabulation analysis and include statistical packages. Advanced use of a text-mining tool involves programming the tool to sift a database for specific data and linkages. Text mining can process a huge volume of information, both real-time and archived and identify patterns



Liang and Xiangsui
stated "A single man-made
stock-market crash, a single
computer virus invasion, or
a single rumor or scandal
that results in a fluctuation
in the enemy country's
exchange rates or exposes
the leaders of an enemy
country on the Internet, all
can be included in the ranks
of new-concept weapons."

that escape human analytical capability. Text mining is a powerful tool but not a panacea. The products require trained, human judgement to make them useful.

Any actor's security elites express thoughts that have been influenced by high-level intelligence, military and diplomatic briefings, interagency working groups tasked with policy formulation, blue-ribbon commission reports and other informationdense sources. Those thoughts therefore contain traces of distilled policy-formulation activity. Analysis of many sources may reveal patterns and linkages that trace the outlines of an actor's future policy and actions. The optimum level for targeting qualitative analysis is probably not the pinnacle of power, although that is necessary. Many statements by leaders are rigorously vetted through their staffs, including even their seemingly impromptu remarks, and by the

time the leader publicly announces a policy it may be in motion. Depending on the actor, the richest information sources may be within the two or three concentric rings around the leader. These elite circles prepare the decision briefings, attend the interagency working group meetings and draft position papers that inform decision makers and shape policy.

From a security perspective we want to know who the threats are, the means they intend to use, their targets and the ends they are pursuing. This is fairly easy when dealing with an opposing state, overt conflict, known capabilities, targeting for optimum military effects and clear ends based on announced war aims. A greater challenge is understanding emerging threats in the current security environment such as actors (or states portraying actors) employing unconventional means against nontraditional targets, for widely varied ends through asymmetric, potentially anonymous, strategies.

This article examines a single book to demonstrate text mining's utility. For actual analysis a single source is insufficient; hundreds, if not thousands, of sources would be mined. But the example demonstrates the process. The publication is *Unrestricted Warfare* by Qio Liang and Wang Xiangsui, both senior colonels in the Chinese military. In their book, the authors detail a strategy for war against the United States that avoids strengths and attacks

REGIONAL STUDIES

vulnerabilities. They argue that future war is not limited to the military domain and that conflict will encompass all human activities, including those traditionally viewed as nonmilitary and irrelevant to military outcomes. The credentials of the authors, the official publication of the book and the laudatory reception of their work suggest that their thoughts may help shape the general outline of emerging Chinese doctrine. The book even sketches some potential strategic outlines of attack should there be a conflict between China and the United States.8

Text mining of *Unrestricted Warfare* followed a structured list of threats, means, targets and ends to classify passages. This structure functioned as the study's codebook, a listing of all terms used to identify elements of interest. The codebook was supported by a dictionary that defined what each code meant,

gave the context appropriate for assigning a code to a passage, determined when the code would not be assigned to a passage and gave an example text passage corresponding to that specific code. For example, each text passage was analyzed, or mined, to reveal a specific actor by both capability and intent, the means the actor employed, target selection and the ends desired by the actor. Within each of these four categories the passage was further analyzed, with codes assigned to a specific type of threat, specific means, specific target types and specific ends sought as depicted in Figure 2.

Using the table's coding structure reveals patterns inherent in the text. Code chains, or logic linkages, consisting of Threat→ Means→ Target→ Ends were clarified, such as Information Warfare Team→ Cyberstrike→ Banking and Finance→ Asymmetric Conflict/Contain the United States. Additionally, the coding process allowed multiple coding within categories, which provides better resolution of intent. Recurring clusters of codes within a category, such as Cyberstrike/Economic Attack/Information Operations within Means suggest that these specific combinations of Means should be expected in future conflict with an actor whose data was mined.

Qualitative content analysis yields information and patterns within text (as quantitative content analysis does within numeric databases) that authors (database managers) themselves may not know is there. This powerful, automated tool can sift vast



A threat kingdom actor is the most dangerous potential opponent, able to engage across the entire conflict spectrum in time, space, intensity and instruments of power, including strategies of asymmetry and anonymity. The concept of a threat kingdom is not synonymous with the label of superpower

or areat power.

amounts of data, flagging the most promising for human analysts. Clarification of patterns, frequency of word or phrase occurrence and other tools help analysts see "red, blue and gray" perspectives and interrelationships, as illustrated in Figure 1. There are limits to what can be revealed by mining, and well-designed analysis integrates seasoned human judgment with mining tools. Common sense should be used in reviewing chains, patterns, clusters, frequency of occurrence and other results of qualitative analysis. Important in determining intent, qualitative analysis is a potent tool—but remains a limited weapon. To determine intent, or "see red," one must know what actors meant, not just what they said. Threats are looking at the United States. The United States should look at them to determine what they see.

SeeingRed

Proposing a new concept of weapons does not require relying on . . . technology, it just demands lucid and incisive thinking. However, this is not a strong point of the Americans, who are slaves to technology in their thinking.⁹

— Qiao Liang and Wang Xiangsui

There are many red perspectives. Known threats, such as specific states or nonstate actors, could be studied. Additionally, theoretical actor types, such as a pure-form transnational criminal organization, could also be analyzed for insights into that model's preferred means, targets and ends. Studying many red perspectives can help model a holistic typology of threats existing across the security environment, or a "threat kingdom." In this context, the definition of kingdom corresponds to the scientific use of the word as "the highest and most encompassing group" of the primary divisions into which objects are classified, such as the animal, mineral or plant kingdom. 10 Ordering threats in categories (analogous to the scientific ordering of kingdom, phylum, class, order and so on) enables better understanding of a specific threat's motives, means, methods and mission. A threat kingdom encompasses all possible capabilities and intents contained in the security environment.

Different red perspectives may overlap by threat type, probable means chosen, targeting preferences

and ends. Some red perspectives may be unique. Actors may closely approximate a pure type, such as an autonomous terrorist organization, while others, such as China, may possess both the capabilities and intent to employ the total spectrum of different threat types in a potential conflict, and thus constitute a complete threat kingdom within a single actor.

In the example of *Unre*stricted Warfare, the authors believe that open conflict between conventional forces arrayed against each other in formations is obsolete.¹¹ Conflict, especially against the United States' currently preponderant military power, will not conform to past models such as the Gulf War. Their argument is supported by conventional military wisdom: an intelligent actor "avoids strength and strikes weakness."12 They state that the overwhelming success of the US-led multi-

national forces and the emergence of new weapons have paradoxically sounded the death knell of such conflict. Instead, conflict "using all means, including armed force or nonarmed force, military and nonmilitary, and lethal and nonlethal means to compel the enemy to accept one's interests" is the new face of war. ¹³ The authors reason that confronting the United States militarily is futile and unnecessary since new means of attack expand the types of targets.

Technology has created "weapons of new concepts."14 These new weapons are more lethal than past weapons. But developing them is futile in today's security environment. The development of improved weapons is expensive. America already has a decided lead, and these weapons do not escape the constraints of the Gulf War-style combat. A breakout strategy called "new concepts of weapons" is required to successfully prosecute war in the current security environment, especially against the United States.¹⁵ This red perspective "views as weapons all means which transcend the military realm but which can still be used in combat operations . . . everything that can benefit mankind can also harm him . . . there is nothing in the world today that cannot become a weapon . . . breakthrough in our thinking can open up the domain of the



The banking and finance system is a component of critical infrastructure, but like the emphasis on cyberstrikes as a subcomponent of information operations, the heavy emphasis on targeting the US banking and finance system by this particular red perspective makes it necessary to track it with a unique code.

weapon kingdom at one stroke. As we see it, a single man-made stock-market crash, a single computer virus invasion, or a single rumor or scandal that results in a fluctuation in the enemy country's exchange rates or exposes the leaders of an enemy country on the Internet, all can be included in the ranks of new-concept weapons." ¹¹⁶

Explicit in the argument is the expansion of targets. Classic warfare was directed against armed forces. Liang and Xiangsui argue that civilian populations will bear the brunt of future war due to countervalue targeting.¹⁷ "What must be made clear is that the new concept of weapons is in the process of creating weapons that are closely linked to the lives of the common people. Let us assume that the first thing we say is: The appearance of new-concept weapons will definitely elevate future warfare to a level which is hard

for the common people—or even military ones—to imagine. Then the second thing we have to say should be: The new concept of weapons will cause ordinary people and military men alike to be greatly astonished at the fact that commonplace things that are close to them can also become weapons with which to engage in war. We believe that some morning people will awake to discover with surprise that quite a few gentle and kind things have begun to have offensive and lethal characteristics."¹⁸

This red perspective's explicit advocacy of targeting and denying critical infrastructure systems may be a harbinger of warfare to come. Electricity, water, national financial systems, transportation, public health, emergency services and telecommunications are examples of targets that could be affected by new concept weapons. This strategy avoids US strength, targets weakness and transcends constraints of a classic military perspective. However, the target set is not limited to physical facilities. Qualitative content analysis reveals, for example, that the authors include "gene weapons" in their arsenal of new concept weapons. 19 Genetic weaponry engages living organisms, such as crops, livestock and human populations. Given the embryonic stage of genetic research and the widely publicized failures of genetic medicine in human subjects to date, research and development of gene weapons may promise a chilling future of unintended consequences.²⁰

The Threat Kingdom

The new principles of war are no longer "using armed force to compel the enemy to submit to one's will," but rather are "using all means… to compel the enemy to accept one's interests." ²¹

- Qiao Liang and Wang Xiangsui

A pure threat actor is less complex in capabilities and intent than a mixed type. The most complex actor would possess "the highest and most encompassing" capabilities and intent and comprise a threat kingdom of potential strategies. A threat kingdom actor is the most dangerous potential opponent, able to engage across the entire conflict spectrum in time, space, intensity and instruments of power, including strategies of asymmetry and anonymity.

The concept of a threat kingdom is not synonymous with the label of superpower or great power. Superpowers and great powers may be constrained by a variety of factors including norms and political institutions. The United States, while a superpower, does not embrace assassination as a legitimate use of force. Britain, while a great power, does not

Figure 2: Emergin	ng Threats, M	eans, Targets and E	Ends
Threats	Means	Targets	Ends
Autonomous Terrorist Organization	Assassination	Banking and Finance †	Asymmetric Conflict ‡
Cult	Biological Agent	Biological Research/Production/ Storage Installations	Contain the United States
Economic Warfare Team	Bomb	Business	Economic Advantage
Fringe Group	Chemical Agent	Chemical Research/Production/ Storage Installations	Expand Power
Hacker	Cyberstrike	Continuity of Government †	Financial Gain
Information Warfare Team	Direct Action	Diplomatic Target	Hate
Lone Wolf	Espionage	Electric Power System †	ldeology
Paramilitary Group	Extortion	Emergency Services System †	Metaphysical
Spy	Hoax	Water System †	National Security Advantag
State Sponsored Terrorism	Information Operations	Government Installations	Political Change
Traitor	Nuclear Weapon	Law Enforcement	Political Influence
Transnational Criminal Organization	Radiological Agent	Military Installations	Revenge
State *	Economic Attack *	Nuclear Research/Production/ Storage Installations	Survival
Transnational Actor *	Genetic Agent *	Oil and Gas System †	Vandalism
		US Population	Obtain WMD
		Public Health System †	
		Telecommunications/ Information System †	
		Transportation System †	

^{*} During text mining it became clear that this particular red threat perspective envisioned two threat types and two means not templated in the analysis design. State and Transnational Actors: In context, State should be understood as the primary actor portraying another actor, as was anticipated with the threat code "State Sponsored Terrorism." In context, Transnational Actor spans a broader universe. It can be understood as a well-known institutional actor, such as the International Monetary Fund or as a private corporation for instance, the Private Military Company (PMC) Sandline, Inc., a globally operating military-services organization. The means Economic Attack and Genetic Agent were cited by the source document and added to the typology. Economic Attack involves a number of methods from trade sanctions to commodity dumping. Genetic Agent is a pathogen designed to alter genetic material in crops, livestock or humans.

[†] These codes collectively compose the US Critical Infrastructure, as defined by Presidential Decision Directive 63, 22 May 1998.

[‡] Asymmetric Conflict was coded for passages detailing it as a core characteristic. Asymmetric Conflict is not an end in itself, and when it occurred it was coupled with an end code to specify the threat's objective.

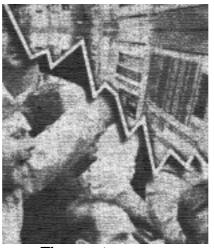
pursue genetically altered bioweapons. Here again is the importance of distinguishing capability and intent in assessing threat. Many actors have the technical knowledge to develop and employ all capabilities, but most do not intend to do so. It follows that a superpower is not the most dangerous opponent an actor in the current security environment can face; a threat kingdom actor is the most dangerous opponent.

Waging what this red perspective refers to as unrestricted warfare depends on two prerequisites: first, a complete toolbox of capabilities and second, the intent to use them if justified by the ends. "This kind of war means that all means will be in readiness, that information will be omnipresent and the battlefield will be everywhere. It means that all weapons and technology can be superimposed at will; it means that all boundaries lying between the two worlds of war

and nonwar, of military and nonmilitary, will be totally destroyed."22

This model fails to recognize that ends constrain means. This failure to adequately understand the primacy of ends, however, does not make Liang and Xiangsui's study of means and targets less important. There has been a sea change in the security environment. The potential for unrestricted warfare exists, and it differs in scope and kind from the Gulf War model of American materiel, intelligence and technical superiority. The differences can be attributed to many factors, especially technology, but also to a change in system structure, the emergence of different actors with nontraditional motivations and emerging "blue" vulnerabilities. This concept of unrestricted warfare helps in the analysis of how this particular red perspective views the threats, means, targets and ends of future war.

The five most frequently cited threat actors in these Chinese strategists' vision of unrestricted warfare were, in order: autonomous terrorist organizations, information warfare teams, states, hackers and state-sponsored terrorist organizations.²³ An autonomous terrorist organization is defined as a group that is political in aims and motives; is violent or threatens violence; conducts operations designed to have far-reaching psychological effects beyond the immediate victim or target; is organized with an identifiable chain of command or conspiratorial cell



The most common chain in the form of Threat → Means → Target → End cited by the Chinese strategists reveals a pattern of State → Economic Attack → Banking and Finance/Business → Economic Advantage. The first and best target from this red perspective is a state's economic health—not its armed forces.

structure (whose members wear no uniform or identifying insignia); and is a subnational group or nonstate entity.24 The information warfare team is defined as a group formed by a state or nonstate actor to conduct information operations as a primary responsibility. The team does not have to be permanent and may be an ad hoc group to accomplish a specific mission. State-sponsored terrorist organizations are groups with the characteristics of an autonomous terrorist organization but that receive additional logistic, training, intelligence or other support from a state and conduct attacks in accordance with some operational guidance from that state.

The five most common means mined from this red perspective were cyberstrikes, information operations, economic attacks, bombing and direct action. A cyberstrike is defined as a concerted computer network attack (CNA) from, through and against

systems to deny, damage, disrupt, alter or destroy the ability of the targeted system to function as intended. The result is system-wide in effect, and typically a cyberstrike will target a critical infrastructure system. Information operations "involve actions taken to affect adversary information and information systems while defending one's own information and information systems. Information operations target information or information systems in order to affect information-based processes, whether human or automated."²⁵

This text-mining procedure applies the US military's doctrinal information operations definition, minus the CNA component. The prevalence of cyberstrike throughout this red perspective, distinct from other information operations such as deception, requires tracking with a separate code. The code "economic attack" was added to the means taxonomy in Figure 1 as a result of its emphasis in the source document and is defined as attacking an opponent's economic interests through trade sanctions, freezing financial and other assets, currency destabilization or hostile trade practices such as commodity dumping. 26 "Bombing" means using an unconventional bomb and does not include bombing by air forces during an overt conflict. "Direct action" is a physical attack directly against a target, whether by a uniformed, armed force or guerrilla or terrorist forces.

REGIONAL STUDIES

In emphasizing both nonphysical and physical means, this red perspective advocates an eclectic mix in unrestricted warfare. It is probable, based on this red perspective, that conflict would not be strictly confined to a physical military confrontation between uniformed forces. Rather, analysis reveals that complementary physical and nonphysical means will be employed immediately in a conflict.

The target sets mentioned by the Chinese strategists are relatively few. The most emphasized target from this red perspective is the US banking and finance system. Second is business, the major corporations that make up the core economy of a state for either substantive or symbolic effect. An example of this code's use is the targeting of US corporations by foreign intelligence services to provide their nation's corporations a competitive advantage. Third is the US population, and fourth is a conglomeration of systems that col-

lectively describe US critical infrastructure as defined by *The Clinton Administration's Policy on Critical Infrastructure Protection: Presidential Decision Directive 63.*²⁷ The banking and finance system is a component of critical infrastructure, but like the emphasis on cyberstrikes as a subcomponent of information operations, the heavy emphasis on targeting the US banking and finance system by this particular red perspective makes it necessary to track it with a unique code.

The targets chosen indicate a strategy that bypasses American military strength while directly attacking critical infrastructure and population. Coupled with asymmetric and anonymous methods, this approach could inflict great damage. Without an identifiable enemy, retaliation is difficult. The ability to threaten America's homeland with significant new concept weapons potentially arms an opponent with a strategic deterrent. The efficacy of US saber rattling and heavy-handed diplomacy decreases when the opponent can inflict harm on American infrastructure and population.

The five most cited ends within this red perspective are national security advantage, economic advantage, financial gain, political influence, and political change. National security advantage is defined as the goal of obtaining an advantage over an opponent to further security of a state or nonstate ac-



One would like to know what potential opponents are thinking. Some intelligence tools like satellite reconnaissance have limited utility to determine intent, when capabilities such as cuttingedge WMD development programs are the target. Likewise, electronic eavesdropping may be deaf to encrypted communications over fiber-optic networks.

tor. The advantage can be tangible or intangible in any instrument of power. Economic advantage is defined as the goal of obtaining a competitive advantage in the economic realm by a state or nonstate actor. Financial gain is defined as the goal of obtaining wealth in currency, commodities or other vehicles of wealth transfer. The code political influence is defined as the goal of obtaining influence in a political system for furthering interests of the actor pursuing the strategy. Political change is defined as the goal of causing a significant change in another actor's political structure through a deliberate strategy of attack using any instrument of power.

The ends emphasized in this red perspective overlap all four instruments of power: military (national security advantage), economic (economic advantage/financial gain), diplomatic/political (political change) and informational (political influence). From this red perspective, any

end that increases power is worth pursuing. Regardless of the threat portrayed, means employed or target set chosen, this red perspective describes a rational actor seeking to maximize power. This trait makes calculation of this actor's purpose in executing strategies relatively easy, if its operations are discovered. Figure 3 clarifies relationship chains among Threats→ Means→ Targets→ Ends.

After mining text, data can be manipulated to show relationships. For instance, an analyst interested in seeing the relationship of different means cited to obtain a given end could sift the data for all occurrences of the specific end's code tied to any means' codes. This pairing would give the analyst insight into the red perspective's thoughts regarding preferred means to obtain a certain end. The permutations and combinations that can be analyzed for insight are almost limitless, but a caution is necessary. The ability to see patterns and linkages once removed from the original source is invaluable for understanding the actor, the original source itself and for gleaning relevant security policy insights. However, further manipulation of extracted data may have a breaking point for pragmatic intelligence analysis. Looking at relationships twice or more removed from the original source, or reprocessing already refined data, may have diminishing returns in qualitative analysis. At some point, additional manipulation of data may yield valid statistics about what was said but does not enhance understanding of what was meant. Where this point lies depends on the source and the research questions explored by the analyst. Qualitative analysis is a powerful tool, but it requires common sense and judgment to yield intelligence.

The most common chain in the form of Threat \mapsto Means \mapsto Target \mapsto End cited by the Chinese strategists reveals a pattern of State→ Economic Attack→ Banking and Finance/Business→ Economic Advantage. This chain suggests that this red perspective considers economic issues important enough to spark some level of covert conflict to change relative economic power relationships between actors. The banking and finance and business sectors were viewed as key targets. From an American perspective, an effective attack on the US financial infrastructure would clearly be a significant

event. But this red perspective's emphasis on business as a key target may differ from an American perspective, in that business is not a direct agent of the state.²⁸ Interpretation of this chain, as with all chains mined from qualitative analysis, should not be inflexible. Within the text passages forming the foundation of this chain are allusions to economic espionage, assistance of private corporations by state intelligence agencies, economic strength as a lever for regional political control, economic intimidation and other related thoughts. The point is that in pursuing unrestricted warfare, the first and best target from this red perspective is a state's economic health—not its armed forces.

A very close second in terms of emphasis is the chain Information Warfare Team/State→ Cyberstrikes→ Critical Infrastructure→ National Security Advantage. This chain heightens the intensity of conflict



We want to know who the threats are, the means they intend to use, their targets and the ends they are pursuing. This is fairly easy when dealing with an opposing state, overt conflict and announced war aims. A greater challenge is understanding emerging threats in the current security environment.

by engaging a broad target set that has physical implications resulting from damage. It also has the end of gaining a national security advantage by improving principally military and diplomatic measures of relative power relationships. Targeting critical infrastructure fits a strategy of avoiding strength and attacking weakness.

This red perspective is statecentric in its viewpoints, not surprising given the source of data. However, the state in the chains above initiates conflict as a covert actor portraving another actor, portending a possible future of targeted states engaged in shadow warfare against unknown actors. Neither of the above chains dictates that the state must remain covert, but analysis of both chains suggests the initial phase of conflict will be a surprise attack by a covert actor

Additional chains and other products and metrics can be extracted from the data, but these

examples show how qualitative analysis can be useful. The ability, automated but human-driven, to mine many sources provides analysts with value-added material and increases insight. One interpretation of this specific red perspective could be that in a war with China, America's private and public economic interests will be attacked abroad and at home and, perhaps simultaneously, computer network attacks will be launched against critical infrastructures. This is a different scenario than military forces facing off around the Taiwan Strait. Brinkmanship with an opponent actually operating from this perspective may involve greater risk of unintended escalation than the six days of the Cuban Missile Crisis in October 1962.

Text mining is an important tool for understanding blue and red perspectives in a fundamentally changed security environment. Such understanding

Figure 3: Emphasized Threats, Means, Targets and Ends							
Threats	Means	Targets	Ends				
Autonomous Terrorist Organization	Cyberstrike	Banking and Finance	Security Advantage				
Information Warfare Team	Information Operations	Business	Economic Advantage				
State	Economic Attacks	Population	Financial Gain				
Hackers	Bombing	Critical Infrastructure	Political Influence				
State Sponsored Terrorism	Direct Action	Critical Infrastructure	Political Change				

is a prerequisite for crafting effective national security policies. During conflict, qualitative analysis can prove a valuable source of information, enhancing the offensive and defensive use of force. The importance of text and data mining increases as other strategic intelligence tools decrease in efficacy, due to target characteristics.

Any actor articulating a perspective, whether a state or a terrorist organization, can be modeled using qualitative analysis. Source data can be a manifesto (such as the Unabomber's) or a web page. Friendly, neutral or hostile (blue, gray or red) perspectives can be modeled with results that enhance security. Qualitative analysis can also serve as a mirror that shows how others perceive oneself.

Unrestricted Warfare was used as an illustrative example in this article but is not an official statement of Chinese doctrine for future war; it is a thoughtful statement by two Chinese strategists. The framework of the document reflects the authors' background as military officers and explores the nature of a potential war between China and the

United States. Mining many such documents yields insights. Threat kingdom actors should be priorities for qualitative analysis techniques.

Without a clear, reliable articulation of an actor's future policy the next best sources of information are the thoughts of that actor's security elite, available from many open sources, such as speeches, articles, books, interviews and policy papers. Qualitative analysis is not limited to text, but could include sources from video to intercepted cellular phone transmissions. Any single information source is of unknown utility for knowing another actor's intent. Text and data mining can sift all available information sources, real-time and archived, extract key information from noise and clarify patterns and linkages not visible to human analytical techniques.

Determining intent is difficult, but it is not mind reading. In a security environment where significant capabilities proliferate out of control, assuming another actor's capability is prudent. Determining intent therefore remains key in identifying threats to American interests. MR

NOTES

Lieutenant Colonel Bill Flynt is a foreign area officer with the Foreign Military Studies Office, Fort Leavenworth, Kansas. He received a B.A. from The Ohio State University, an M.P.A. from Cornell University, an M.M.A.S. from the School of Advanced Military Studies and is completing a Ph.D. focusing on National Security Policy at the University of Kansas. He is a graduate of the US Army Command and General Staff College. He has commanded in combat and served in a variety of staff positions, including chief, Plans and Exercise Branch, 101st Airborne Division, Fort Campbell, Kentucky; S3, 3d Brigade, 101st Airborne Division; and S3, 2d Battalion, 187th Infantry Regiment, 101st Airborne Division. His article, "Threat Convergence," appeared in the September-October 1999 issue of Military Review.

J. David Singer, "Threat-Perception and the Armament-Tension Dilemma,"

Journal of Conflict Resolution, Vol. II, (March 1958), 94.
 Seorge F. Kennan, ""X; The Sources of Soviet Conduct," Foreign Affairs,

XXV (July 1947), 566-82.
 John Lewis Gaddis, Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy (Oxford: Oxford University Press, 1982),

Qiao Liang and Wang Xiangsui, Unrestricted Warfare, trans. Foreign Broadcast Information Service (Beijing, China: PLA Literature and Arts Publishing House, February 1999), 10.
 Colin Elman and Miriam Fendius Elman, "Lakatos and Neorealism: A Reply to Vasquez," The American Political Science Review, Vol. 91, (December 1997), 923-926.

to Vasquez," The American Political Science Review, Vol. 91, (December 1997), 923-926.

6. These broad tenets generally describe what is known as a Realist perspective of the international system. There are other perspectives. Those interested in a primer can see Phil Williams, Donald M. Goldstein and Jay M. Shafritz, eds., Classic Readings of International Relations, 2d Edition (New York: Harcourt Brace College Publishers, 1999).

7. For documentation of US vulnerability to strikes against population and critical infrastructure see George J. Tenet, "Statement of the Director of Central Intelligence," before the Senate Armed Services Committee Hearing on Current and Projected National Security Threats, 2 February 1999, Washington, DC; Lieutenant General Kenneth Minihan, NSA Director, statement before the Senate Governmental Affairs Committee hearing on "Vulnerabilities of the National Information Infrastructure," Washington, DC, 24 June 1998; and President William J. Cliinton, "Remarks by the President on Keeping America Secure for the 21st Century," a speech delivered to the National Academy of Sciences (Washington, DC: Office of the Press Secretary, 22 January 1999).

8. Liang and Xiangsui, 21-22.

9. Ibid., 21.

10. Meriam-Webster's Collegiate Dictionary, 10th ed. (Springfield, MA: Merriam-Webster, 1998), 643.

11. Liang and Xiangsui, 107.

12. Sun Tzu, The Art of War, trans. by Samuel B. Griffith (Oxford: Oxford University Press, 1971), 101.

13. Liang and Xiangsui, 107.

13. Liang and Xiangsui, 6.

14. Ibid., 21.

17. Ibid. Note: there are many similarities between CBNR agent use, cyberstrikes, and the Cold War model of nuclear weapons use. One similarity is that targeting civilian populations with CBNR agents or critical infrastructure with cyberstrikes approximates the Cold War strategic deterrent capability of targeting cities with Inter Continental Ballistic Missiles. A dissimilarity is that retaliation is impossible

covilian populations with CBNR agents of childra infrastructure with cybelstrikes ap-proximates the Cold War strategic deterrent capability of targeting cities with In-ter Continental Ballistic Missiles. A dissimilarity is that retaliation is impossible against an asymmetric, anonymous actor. 18. Ibid., 22. 19. Ibid., 29-30.

^{20.} Even genetic research aimed at creating helpful treatments and involving strict medical research protocols in a scientifically advanced nation can go wrong, as the death of 18-year old Jesse Gelsinger proves. Gelsinger was being treated at the University of Pennsylvania's Institute for Human Gene Therapy when the gene therapy designed to correct his health disorder killed him. "Gene weapons," with their explicit design to inflict harm on a large scale, could be catastrophic if released. As an example of the potential for and consequences of loss of control of so-called "new concept weapons," consider the accidental release of an anthrax bioweapon, engineered to incorporate at least four distinct strains of Bacillus anthracis, at a secret Soviet biological weapons facility near Sverdlovsk, Union of Soviet Socialists Republic, in April 1979. The precise extent of exposure is unknown, but involved hundreds, perhaps thousands, of deaths. For further information on Gelsinger and the University of Pennsylvania's gene treatment, see Jeffrey P. Kahn, Gene Therapy on Trial (Minneapolis, MN: University of Minnesota Center for Bioethics, 8 February 2000), document at <a href="https://www.cnn.com/2000/HEALTH/02/07/ethics.matters/ethics/ethics/ethics/ethics/ethics/ethics/ethics/ethics/ethics/ethics/ethics/ethics/e

^{22.} Ibid., 11.
23. Content analysis was conducted using accepted standards for qualitative analysis methodology in the political science field. Interested individuals can consult Udo Kelle, ed., Computer-Aided Qualitative Data Analysis: Theory, Methods, and Practice (Thousand Oaks, CA: Sage Publications, 1995) for an overview. Software packages used included both open-source code and commercial pack-

ages. 24. Bruce Hoffman, *Inside Terrorism* (New York: Columbia University Press.

Bruce Hoffman, Inside Terrorism (New York: Columbia University Press, 1998), 43.
 Joint Publication 3-13, Joint Doctrine for Information Operations (Washington, DC: Joint Chiefs of Staff, 9 October 1998), vii.
 A second means was added as well—Genetic Agent, a pathogen designed to alter genetic material in crops, livestock or humans.
 The US critical infrastructure is comprised of key sectors that are essential

^{27.} The US critical infrastructure is comprised of key sectors that are essential to the minimum operations of the economy and the government, directly impacting on the US population. These infrastructures are information and communications, continuity of government services, banking and finance, water supply, electrical power, oil and gas production and storage, transportation, emergency services, and public health services. See The Clinton Administration's Policy on Critical Infrastructure Protection: Presidential Decision Directive 63 (Washington, DC: Executive Office of the President, 22 May 1998).
28. These strategists view systems as highly centralized and "brittle." They are partly correct regarding some systems. However, infrastructures also are robust, redundant, resilient and recuperable. Systems analysis of targeted infrastructures would reveal unique traits and degrees of vulnerability.

would reveal unique traits and degrees of vulnerability

Under New Ownership It's Panama's Gana

Colonel William W. Mendel, US Army, Retired

The canal must always be regarded as a potential target for both conventional and unconventional forces, given its importance to global commerce and for military transits.¹

—General Charles E. Wilhelm

N 31 DECEMBER 1999, after 85 years of US military presence and influence, the Republic of Panama took full ownership and responsibility for the Panama Canal. Full control of the country's sovereign territory offers Panamanians increased esteem and energizes the spirit of economic opportunity. Even in this time of electronic commerce and jet transport, the canal is important to glo-bal trade and the economic growth in Latin America. However, as the largest user of the canal, the United States has an economic stake in its future—about 66 percent of the canal's traffic starts or ends at US ports, accounting for 12 percent of US seaborne trade.²

Former US President Jimmy Carter and Head of Government for the Republic of Panama, Omar Torrijos Herrera, signed the *Panama Canal Treaties* at the Organization of American States building in Washington, D.C. on 7 September 1977, announcing the return of the canal to Panama at the end of the 20th century. Today, Panama has assumed total sovereignty of the 553 square-mile Panama Canal Zone and takes on the duty of defending the canal and the nation. Panama's new National Security Strategy will guide this effort.

In promoting Panama's National Security Strategy to various political groups, Winston Spadafora, Panama's Minister of Government and Justice, advises that this is the first time that Panama will assume security responsibilities without US support. Faced with threats to its security and sovereignty, Panama needs to activate a coherent, resourced plan for enhancing national security. This article focuses on the major security threats facing the Republic of Panama and discusses the plan underway to strengthen Panama against these threats.

Low pay in law enforcement, the government work force and the judicial system tempts incumbents to use their positions for financial gain. As an example, late appointments to the court that were made by the outgoing Balladares Administration allegedly to stymie investigations into the sale of thousands of Panamanian visas to Chinese citizens.

ARange of Emerging Threats

As it takes control over its security policy and operations, Panama will have to face up to a wide range of threats that could erode the country's well being. These threats include government ineptness and corruption, crime, drug trafficking, foreign influence, arms trafficking, disrupted canal operations and the loss of sovereignty in border areas due to guerrilla activity, paramilitary forces and criminal groups.

The US Southern Command (SOUTHCOM) considers Panama's internal problems as the most likely threats to canal operations. Labor disputes and civil unrest sparked by low wages, unemployment and poverty could disrupt work at the canal and elsewhere in the country.⁴ During recent Congressional testimony, SOUTHCOM commander-in-chief, General Charles E. Wilhelm, expressed concern over the potential for ungoverned development in the former canal zone. Former President Jimmy Carter expressed this same concern during the 14 December 1999 canal transfer ceremony. Without tight control by the Panamanian government, the vital watershed that supplies the 52 million gallons of fresh water needed for each ship to pass through the canal's locks would be at risk.

In the years since the *Panama Canal Treaties* were signed, Panama's governments have been unwilling and unable to control peasant infiltration into the pristine forest lands formerly controlled by the canal authorities. Slash-and-burn agriculture

and subsequent cattle grazing have already significantly degraded the Chagrés River Basin which supplies most of the canal water. Water reserves for Panama City, Panama, are also at risk. Inadequate controls and outright corruption could allow continued destruction of the country's central forest reserves and cause increased silting in the rivers and uneven water supplies. Government corruption is a national danger that Panama acknowledges.⁵

A national anticorruption effort. Government corruption was a recurrent issue during the transfer of governments from the Ernesto Peréz Balladares Administration to that of President Mireya Moscoso. Moscoso's inaugural speech emphasized the need to stamp out corruption, drug trafficking and incompetent bureaucracy. Low pay in law enforcement, the government work force and the judicial system tempts incumbents to use their positions for financial gain. As an example, Moscoso expressed concern about late appointments to the court that were made by the outgoing Balladares Administration allegedly to stymie investigations of a scandal involving the sale of thousands of Panamanian visas to Chinese citizens.⁶

Moscoso's National Anti-Corruption Office in the Ministry of Economy and Finance is drafting a code of ethics for government officials and legal sanctions for government crooks. Corruption and inefficiency within the justice system can leave Panama vulnerable to wealthy international criminals such as narcotraffickers, gunrunners and Colombia's drugenriched guerrilla and paramilitary groups.

Crime in Panama. Robbery, mugging and other forms of petty crime have been significant problems in Panama City and Colón for many years, so much so that both tourists and residents must take precautions to avoid becoming victims. Once driven by poverty and unemployment, Panamanian crime has leaped since the introduction of drugs (crack cocaine or bazuco) in the 1980s. Panamanian drug dealers who act as middlemen for the transit of drug products from Colombia to Mexico and the United States are often paid in cocaine and heroin. Their need to exchange these drugs for money has turned Panama into a country with a drug-abuse problem.⁷ The US State Department estimates that 20 percent of drug seizures in Panama are destined for consumption by local Panamanians, especially city youths and Kuna Indians. Additionally, Vice President Dominador Kayser Bazan stated his concern about the wave of kidnappings in the country and called for increased penalties for such crimes.

Drug trafficking and money laundering. Panama is not a drug-producing country, but its strategic location, container shipping industry, free-trade zone, robust banking industry, government corrup-

tion and bureaucratic lassitude make it an inviting transit and distribution center for illicit drugs and money laundering.

The country is one of the world's major drug transhipment locales because of its inability to control air, sea and land entry. Panama serves as a transfer base for passing cocaine and heroin products from

Panama Ports Company, a subsidiary of Hutcheson Port Holdings of Hong Kong shipping firm Hutcheson-Whampoa, Ltd., began a 25-year lease (with an 25-year renewal option) to operate port facilities at Balboa (Pacific side of the canal) and Cristobal (Atlantic side). This arrangement benefits China, which is the third-largest user of the canal.

Andean Ridge countries to consumers principally in North America, but also in Europe and Asia. As the US State Department has indicated, "shipments dropped off in Panama are repackaged and moved northward on the Pan-American Highway or depart in sea freight containers." Small, single- and twinengine aircraft and larger commercial aircraft also move the contraband. Panama also serves as a conduit for passing money and essential illegal chemicals southward to the drug-producing countries.

The 1,600 commercial import/export companies in the Colón Free Zone, are fulfilling Jimmy Carter's vision, relayed at the transfer ceremony, that Panama become the Singapore of this hemisphere. The Colón Free Zone Administration functions as a semiautonomous department of the Government of Panama. According to the zone administration, "importers specialize in bringing in container-loads of goods and breaking them down for resale." This activity helps make the Colon Free Zone an inviting environment for transnational merchants of death—gunrunners and drug traffickers. However, a disclaimer on the free zone website insists that "strict measures to thwart money laundering and brand-name piracy are in place."

Panama has long been an important international trading, banking and financial services center—and a site for foreign direct investment. Panama's economy is characterized by low inflation and zero foreign exchange risk because of its connection to the US dollar. In early 1998, Panama enacted a new banking law intended to detect and deter money laundering. Yet, even though Panama is a global center of finance (or because of it), the country has not been able to pursue transnational crime and money-laundering cases effectively within its criminal justice system due to evidentiary standards

which put prosecutors at a disadvantage. In practice, Panama has established a business environment that is open to the influence of legitimate international interests as well as emerging threats like transnational crime.

Foreign influence and control. When the United States gave Panama full control of the canal, critics raised concerns about foreign influence and control over the canal's operation—particularly during an

As with the border incursions of irregular armed groups into Darién, the issue of protecting refugees is problematic for a country that can not protect its own citizens in remote border areas. When FARC guerrillas overran the Colombian port city of Jurado (on the Pacific side) almost 500 Colombians fled along the southern coast to Jaque, Panama. The situation is similar on Panama's Caribbean coast in easternmost San Blas Province.

international crisis. Prompting the concern was the potential strategic reach of the Chinese military through the financial interests of Hong Kong tycoon billionaire Li Ka-shing, whose fortune and power derive from his connections to the government of the People's Republic of China.¹¹ Panama Ports Company, a subsidiary of Hutcheson Port Holdings of Hong Kong shipping firm Hutcheson-Whampoa, Ltd., began a 25-year lease (with an 25-year renewal option) to operate port facilities at Balboa (Pacific side of the canal) and Cristobal (Atlantic side of the canal). This arrangement benefits China, which is the third-largest user of the canal and sells more than \$1 billion in goods a year through the Colón Free Zone.¹²

Chinese investment in the canal is more representative of foreign investors attracted to opportunity in Panama than a threat to control the operations of the waterway. Taiwan also has an extensive business presence in the canal area. ¹³ Besides, the Constitution of Panama reserves direct authority and control over the canal. ¹⁴

According to Chinese officials, the idea that the People's Republic of China is attempting to influence or take over the Panama Canal is "sheer fabrication with ulterior motives." Nonetheless, Chinese immigration has been increasing in recent years. The Chinese, originally a source of labor on the transisthmian railroad, now represent somewhere between 4 and 8 percent of the population. This is about the same number of citizens as Panama's indigenous peoples of the Kuna, Guaymie and Chocoe tribes.

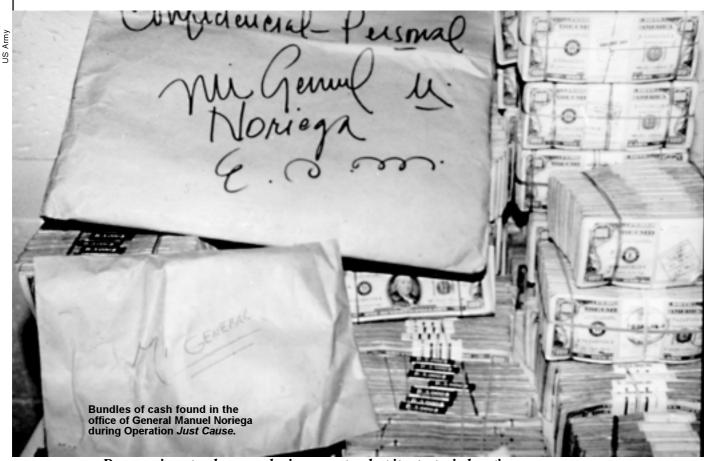
Wilhelm testified before Congress that China's interest in Latin America is unrestricted access to trade and natural resources. China now has \$8.2 billion invested with over 200 commercial enterprises in the region, suggesting that the threat is expanding Chinese influence throughout Latin America and not a specific threat to the canal.¹⁷

From a Panamanian point of view, intervention by the United States is a more credible threat than a Chinese takeover. A Chinese Communist newspaper expressed Panamanian concerns in the inflamed rhetoric popular with some in Panama: "People who pose as the 'world policeman'... are false in showing 'concern' for the 'security' of others, and ... their real intention is to create public opinion and pretexts for armed intervention in the sovereignty of other countries.... [T]he US military presence along the Panama Canal is not for the purpose of protecting the canal or being concerned about our borders, and still less is it for the sake of Panama's security; it is for the purpose of preserving US strategic interests." 18

US contingency operations responding to rampant narcotrafficking and corruption or to Panama's loss of control of Darién Province to Colombian-based guerrilla and criminal activities (a concern as the US is now planning greater involvement in the Colombian narcoinsurgency) seem to Panamanians like plausible scenarios for US intervention and give impetus to the need to quickly put Panama's National Security Strategy into action.

Arms trafficking. Gunrunning across Panama's borders from neighboring Costa Rica and Colombia continues. Since the drawdown of Central American conflicts in Guatemala, Honduras, El Salvador and Nicaragua, enterprising criminals have transshipped leftover arms and munitions through Costa Rica to Panamanian ports, and then on to South American markets. A few years ago, a steamroller drum full of weapons exploded as it was being cut open with a welding torch by suspicious Judicial Technical Police, killing three persons and injuring 26 others at Colón Province's Cristobal Port. Those particular weapons were probably headed to Peru, although Colombian guerrilla groups are usually the primary buyers of illicit weapons.¹⁹

Typically, arms shipments travel along Costa Rica's northern coast to Panamanian border ports like Almirante and Bocas del Toro, then along Panama's coast to Colón or adjacent Coco Solo. The contraband includes AK-47 automatic rifles, hand grenades and other explosives. The weapons then proceed via border towns such as Puerto Obaldia on Panama's Caribbean coast through the Gulf of Urabá and subsequently to Colombian insurgents and drug traffickers.²⁰ The increased presence of Colombian



Panama is not a drug-producing country, but its strategic location, container shipping industry, free-trade zone, robust banking industry, government corruption and bureaucratic lassitude make it an inviting transit and distribution center for illicit drugs and money laundering... Importers specialize in bringing in container-loads of goods and breaking them down for resale. This activity helps make the Colon Free Zone an inviting environment for transnational merchants of death—gunrunners and drug traffickers.

Navy units in the Gulf of Urabá during the past year is shifting the gunrunning to Pacific Ocean routes.

According to Panama's First Superior Court Prosecutor Edwin Alvarez, payment for guns is made with cash or drugs.²¹ An AK-47 rifle worth \$400 in Central America can fetch \$2,000 or more in South America. To counter the contraband traffic, Panama typically stations several patrol craft of its National Maritime Service at border ports on the north and south coasts, but the sea areas are vast. Panama's small "coast guard" cannot protect the San Blas and Darién littorals from pirate raids against coastal shippers and fishermen, and it certainly has trouble controlling gunrunning and Colombian guerrilla incursions. Aside from calling into question Panama's competence to handle transnational threats, these dangers have had no impact on the canal's operations.

Defendingthe Canal

Panamanians recognize the difficulty of defending the canal. It is vulnerable to a number of threats such as sinking a ship in the waterway, direct action by special operations forces using explosives against critical nodes, destruction of the watershed by unsound environmental practices and even a downturn in operational efficiency due to corruption or poor management. As a linear target stretching through waterways and jungle, the canal is nearly impossible to defend traditionally. Although reasonable measures can forestall or respond to terrorist actions, protection begins with a policy of neutral canal operations. Indeed, the *Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal* declares that the canal shall be permanently neutral so that the canal and Isthmus of Panama will not be the target of reprisals in any armed conflict.²²

By the *Neutrality Treaty*, the United States is assigned the responsibility and right to "act against any aggression or threat directed against the canal or against the peaceful transit of vessels through the canal." Hundreds of US warships, including submarines, transit the canal each year. Thus, SOUTH-COM war gamers have worked out processes by which any direct threat to high-value shipping or to the canal can be met with a United Statesbased joint task force operating in cooperation with



An AK-47 rifle worth \$400 in Central America can fetch \$2,000 or more in South America. To counter the contraband traffic, Panama typically stations several patrol craft of its National Maritime Service at border ports on the north and south coasts, but the sea areas are vast. Panama's small "coast guard" cannot protect the littorals from pirate raids against coastal shippers and fishermen, and it certainly has trouble controlling gunrunning and Colombian guerrilla incursions.

Panamanian Public Forces (PPF). Officers of the PPF, particularly the Maritime Service, will participate in developing future contingency plans for defending the canal.²⁴

The government of Panama understands that the canal is important to global trade and has been willing to seek outside help with protection issues. It has vigorously sought help from Canada, Taiwan and trading nations in Europe for canal defense assistance. For the moment no one appears to menace the canal, but Panama faces other, more imminent threats.

Panama's Vulnerable Frontier

Panama's most contentious national security issue is control of its border areas—particularly the border with Colombia. Colombia's internal war has become intense in the last five years, and there has been a spillover effect as the warring factions cross into neighboring countries. Colombian belligerent forces include two guerrilla groups. The National Liberation Army (ELN), under Pablo Beltran, operates in Colombia's northern areas; the Revolutionary Armed Forces of Colombia (FARC), under Manuel Marulanda, operates in the central and southern areas of Colombia, including the areas along the Colombia-Panama border. When the

FARC advances into Panama to establish sustainment bases, bands of paramilitary forces follow the guerrillas to harass and attack them. The paramilitary units are organized under the banner of the Colombian United Self-Defense Forces (AUC), lead by Carlos Castaño. The AUC is widely thought to be encouraged by some leaders in the Colombian Armed Forces.

Numerous false reports on activities along the border with Colombia have detracted from a national consensus about Panama's response. Remarks by officials about the deluge of border incidents range from denial to demands for action, suggesting a variety of political interests in the crisis. President Moscoso is concerned for defending the national patrimony; national police officials are focused on law enforcement; and Panamanians living in remote, easternmost San Blas and Darién Provinces fear harassment and brutalization by Colombian paramilitary forces, guerrillas, pirates and common criminals.

The idea that foreign combatants and lawless elements freely violate Panamanian sovereignty embarrasses the central government, diminishes its legitimacy and suggests the impotency of the PPF. Among 1,200 Panamanians recently surveyed, 70 percent felt that Panama cannot protect its borders. The eastern part of the country, where only two percent of the population lives, has been invaded, and its citizens have been harassed and displaced from their homes. The country needs to find ways to defend the area. This was made all the more urgent when Castaño said last September, "[W]e have declared as military targets all members of the Panamanian National Police who are working in open collusion with the FARC along the border."

Border incursions by Colombian paramilitary and FARC groups have been especially prevalent along the border with Colombia since the mid-1990s. Colombian Army units pursuing the FARC have crossed into Panama.²⁷ While the FARC fronts have violated Panamanian sovereignty by positioning units in Panama for resupply, training and rest, harassment of Panamanians has come mainly from paramilitary groups that resent the sustenance afforded to the FARC.

Underscoring current priorities, former Foreign Minister Jorge Ritter stated that guerrillas in the Darién area do not threaten the canal since its operations are not related to the border situation. This assessment is not reassuring, since FARC operatives reached all the way into Panama City in November 1999. The insurgents captured two helicopters from the Albrook airport and flew them via San Blas Province to Colombia for use in medical evacuation and supply transport. Discontinuous province of the colombia for use in medical evacuation and supply transport.

REGIONAL STUDIES

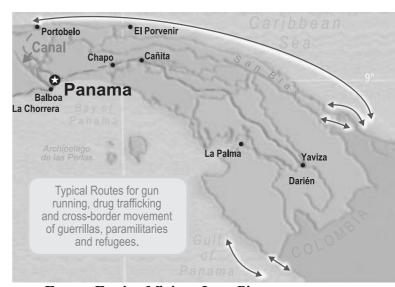
An illustrative border incident occurred last year at La Miel, a small Panamanian village in the Kuna Yala Indian region on the north coast at Shark Cape (Cabo Tiburón) and just a kilometer west of the Colombian village of Sapzurro. In April and May 1999, several hundred troops from the FARC's 57th Front (and possibly other fronts) raided the Colombian town of Sapzurro (on the Gulf of Urabá), then moved westward into Panama's Kuna Yala Indian territory.30 Panama's Indian communities of La Miel, Armila and Puerto Obaldia were directly threatened by the heavily armed guerrillas. Even paramilitary forces of the AUC were spotted in the area. By June, 120 Panamanians from La Miel fled the border area to safer provinces after FARC guerrillas appeared in their village.

Telemetro Television Network reporter Angel Sierra visited with more than 50 guerrillas of the FARC front and with La Miel residents. Sierra reported that the main concern was that paramilitaries of the United Self-Defense Group would move into the area and kill any villagers thought to be associated with the guerrillas.31 Meanwhile, Darién Bishop Romulo Emiliani asked for increased security in the area to protect against the spillover of the Colombian war. But Mariela Sagel of the justice ministry denied that police were fleeing the La Miel area in advance of the guerrillas. The La Miel danger was minimized by former National Police Director Gonzalo Menendez Franco who advised that armed people have been in the area for 25 years and that "there is no violence on the Panamanian-Colombian border."32 Meanwhile, Enrique Garrido, Deputy at the Kuna Yala territory observed that both guerrillas and paramilitary Self-Defense Forces of Cordoba and Urabá were in the area preparing for a fight, and that "residents have readied their boats to flee."33

President Moscoso has suggested cooperating with Colombia to set up a security cordon on the border to assure residents' safety. Moscoso wants to train policemen in counterinsurgency tactics and provide the necessary equipment to make them effective. ³⁴ The Border Police Service (SEF) now has over 2,000 personnel stationed throughout Darién Province. ³⁵ The turbulence at the border has given rise to the additional problem of illegal immigration.

Refugees and Immigration

Refugees crossing the border from Colombia into Darién represent another threat to Panama's sovereignty because they are linked to the border conflict and the incursions carried out by the FARC and AUC. The growing number of Colombians crossing over the border to seek safety in Darién has gained international attention. The US Committee for Refugees reported in 1997 that Panama had forc-



Former Foreign Minister Jorge Ritter stated that guerrillas in the Darién area do not threaten the canal since its operations are not related to the border situation. This assessment is not reassuring, since FARC operatives reached all the way into Panama City in 1999. The insurgents captured two helicopters from the Albrook airport and flew them via San Blas Province to Colombia for use in medical evacuation and supply transport.

ibly returned 90 Colombian asylum-seekers. This report energized the United Nations High Commissioner for Refugees to negotiate with Panama on minimal rules for processing refugees. Rules included adherence to the principles of *non-refoulement* (unforced return) and temporary security for refugees. As with the border incursions of irregular armed groups into Darién, the issue of protecting refugees is problematic for a country that can not protect its own citizens in remote border areas.³⁶

Colombian refugees can place heavy demands on Panama's resources. When FARC guerrillas from several fronts overran the Colombian port city of Jurado (on the Pacific side) almost 500 Colombians fled 65 kilometers along the southern coast to Jaque, Panama. Fortunately, several humanitarian organizations provided refugee assistance, and by March 2000, about 100 Colombians had returned to their homes in Jurado.³⁷ The situation is similar on Panama's Caribbean coast in easternmost San Blas Province. Conflict in Colombia's Gulf of Urabá region has driven refugees west, toward Puerto Obaldia.

At the end of 1998, Panama's National Organization for Refugee Attention identified over 600

Colombian asylum-seekers in Panama. According to the US Committee for Refugees, Panama had 1,300 refugees in 1998, 600 from Colombia and 700 from other nations such as Nigeria, Sudan,

Legitimate industry, drug traffickers and smugglers use the Colombian Black Market Peso Exchange to filter millions of dollars through Panama each year. Money passed through the BMPE and other schemes finds its way into "legitimate" business development in Panama but is not immediately taxable. The canal, with sound management, will pay for its own operation in the near term, but it will not be a cash cow for the government's treasury.

Algeria, Peru and Cuba. An additional 7,000 Colombians live in Panama with legal migrant status obtained through Panama's 1994 *Migratory Regularization Act.*³⁸

Planning for National Security

In November 1999, a Panamanian diplomatic mission headed by Foreign Minister Jose Miguel Aleman met with Peter Romero, US Assistant Secretary of State for Inter-American Affairs, to discuss the draft National Security Strategy, US support for Panamanian social programs and greater US market access.³⁹ The bilateral discussions covered four areas for potential assistance: national security, trade and agriculture, law enforcement and social issues.

A primary concern was developing a national security strategy for Panama that could quickly fill the security void created by US military departure. The planning process included a strategic assessment, identifying Panama's national security interests and developing the ends, ways and means of the strategy. With some assistance from US planners, President Moscoso's national security team developed 11 campaign plans to implement her strategy. These plans address elements of national power and responsibility such as health, education, transportation, agriculture, environment, trade and border security.

Within this planning framework, the Moscoso vision for Panama's future includes a stable, economically prosperous democracy that can ensure human rights and secure the national patrimony. Threats that could unhinge this vision include the aforementioned social instability, government corruption, transnational crime, border security, disruption of canal operations and environmental degradation of Panama's environment (especially the canal watershed).

The ends, ways and means of Panama's strategy. Principal strategic objectives of Panama's Na-

tional Security Strategy include securing the prosperity and welfare of all Panamanians and integrating Panama into regional affairs. Generalized concepts for achieving these objectives include:

- Participating in bilateral and multilateral security agreements;
- Integrating marginalized sectors of society into Panama's mainstream; maximizing the effectiveness of the PPF;
- Establishing a national-level command and control infrastructure;
 - Encouraging judicial reform;
- Employing the PPF to establish border control; and
- Securing the canal through a regimen of strict neutrality.

To date, Panama's National Security Strategy has not received final approval from President Moscoso. It is likely to be validated and placed into action by a Presidential Decree (similar to the way a US National Security Decision Directive is activated) because waiting for congressional action is certain to induce various contending national security schemes sponsored by political parties.

It may be difficult to find adequate resources to implement the security strategy. Panama's population (2.8 million, with 37 percent living below the national poverty line) and gross domestic product (GDP) of \$9.1 billion demonstrate that resources are limited. 40 Services represent 76.2 percent of the GDP, and this is a difficult sector from which to generate new tax revenue. The government will have trouble turning the illicit banking (money laundering) industry into a legitimate structure that can be profitably taxed.

Legitimate industry, drug traffickers and smugglers use the Colombian Black Market Peso Exchange (BMPE) to filter millions of dollars through Panama each year. ⁴¹ Money passed through the BMPE and other schemes finds its way into "legitimate" business development in Panama but is not immediately taxable. The canal, with sound management, will pay for its own operation in the near term; however, it will hardly be a cash cow for the government's treasury.

Panama will lean heavily on foreign assistance, and the US government will likely underwrite Panama's National Security Strategy. Over the next several years Panama will benefit from sharing intelligence with SOUTHCOM and participating in its exercises and other activities. The PPF will likely receive annual assistance for training and modernization through US international military education and training assistance (\$100,000 per year) and foreign military financing assistance (\$590,000 per year).



Hundreds of US warships, including submarines, transit the canal each year.
Thus, SOUTHCOM war gamers have worked out processes by which any direct threat to high-value shipping or to the canal can be met with a United States-based joint task force operating in cooperation with Panamanian Public Forces (PPF). Officers of the PPF, particularly the Maritime Service, will participate in developing future contingency plans for defending the canal.

SOUTHCOM provides vital assistance to the Panamanian government in developing a national security strategy and some of the means necessary to make it work. Through its regional engagement plans, SOUTHCOM will assist with building national level command and control procedures for directing the security forces, including a national level command, control, communication and intelligence (C³I) system. Panama's security strategy will define the roles and missions of the PPF, and SOUTH-COM will assist the PPF with emergency planning, equipment modernization and training. The objective is an effective national C³I system and a modernized PPF that can secure the canal and provide security throughout the rest of the country.⁴²

The United States is making considerable effort to help Panama launch its new security strategy, so additional forms of security assistance will come from the US Departments of State, Justice and Transportation. For example, the State Department's International Criminal Investigative and Training Assistance Program is providing law enforcement training and education to improve the professionalism and capabilities of Panama's police.⁴³

US assistance is imperative because Panama's success will contribute to US interests as well. The US Ambassador to Panama has made it his duty to help Panama develop a professional defense staff, improve the PPF and build a professional national police force. The National Maritime Service and Air

Service will be assisted to expand their capabilities for search and rescue, counter drug and disaster relief operations. The United States intends to help the PPF with its missions of securing Panama's canal and border areas because Panama's current force is not up to the task.

Panama's Public Force. With the US destruction of the Panama Defense Forces in 1989 and their constitutional abolition in 1994, there is a strong opposition to remilitarizing Panama—even after the full withdrawal of US forces in 1999. Implementing defense and security dimensions of Panama's security strategy will be difficult since PPF totals about 15,000 people. The challenge is to better utilize and improve a force that is lightly equipped and undertrained.

National defense falls on the civilian-controlled public force, made up of four services. These include the Panamanian National Police (PNP), a coast guard called the National Maritime Service (SMN), the National Air Service and the Institutional Protective Service (SPI).

The PNP is the largest of the four national services, having more than 13,000 officers. The PNP is a paramilitary force, organized into 13 police zones, with one military police battalion, eight military police companies and 18 civil police companies. 44 Its mission is to uphold the constitution, provide for public security, conduct riot control and protect the national patrimony. Acting jointly with

the maritime and air services, the PNP shares the principal burden for defending the border regions.

In addition to the PNP units, Panama has the Judicial Technical Police (PTJ), responsible for conducting criminal investigations. The PTJ has about 1,000 officers. The PTJ counternarcotics squad, located with the Public Ministry's drug prosecutor, works with the United States in bilateral counterdrug efforts. In 1999 the Panamanian National As-

A policy of regional engagement will enhance Panama's national security, particularly through interaction with those nations that have trading interests in the canal. The Panama Canal Treaties provide a ready means to engage the global community as nations will expect and support the strict neutrality of the canal and its access for all.

sembly transferred the PTJ from the attorney general to the supreme court. The US State Department reports that the results have been "serious deterioration in law enforcement cooperation to the extent that meaningful investigations, police work and . . . prosecutions have been negatively affected."⁴⁵

The National Maritime Service has approximately 600 personnel and 20 patrol boats of various sizes. It is being transformed into a paramilitary coast guard but will need additional equipment and training to provide adequate security for regulating the canal, defending the sea approaches to the frontiers and contributing to the counterdrug effort.

The National Air Service is a small transportation force with most of its aircraft based at Tocumen International Airport near Panama City. It has as many as 25 light fixed-wing and helicopter aircraft, plus another dozen UH-1 Huey transport helicopters. 46 This air transport capability will be critical if Panamanian forces are to operate jointly against the emerging threats.

Similar to the US Secret Service, the SPI protects dignitaries but has taken on the additional responsibility of protecting the canal and is currently undergoing special training to prepare for that mission. The SPI, with about 400 personnel, could be reinforced with other public security units. SPI units have been stationed at Espinar to oversee the Gatun Locks, at West Corozal to secure locks and the canal entrance on the Pacific side, while the SMN will reinforce the effort from Rodman naval base.⁴⁷

The modernization and professionalization of these forces will be critical for launching Panama's security strategy on a solid footing. Minister of Justice Spadafora, a member of the core group that developed Panama's National Security Strategy, looks beyond the public forces for success. He sees the republic's strategy supported by three pillars: national security, internal security and democratic responsibility.⁴⁸

LookingAhead

Panama can be expected to advance an integrated national security policy that pursues economic, social and security interests. Major objectives will be to provide for a secure environment and economic development that can improve the living standards of Panamanians now living below the national poverty line.

A policy of regional engagement will enhance Panama's national security, particularly through interaction with those nations that have trading interests in the canal. The *Panama Canal Treaties* provide a ready means to engage the global community as nations will expect and support the strict neutrality of the canal and its access for all.

The United States will encourage regional efforts to assist Panama with its security and development issues, but members of the Organization of American States with trading interests closely linked to the canal (such as Peru, Ecuador and Venezuela) have their own political and security concerns and will likely not provide much more than cheerleading from the sidelines. Resolution of Panama's security issues will be closely linked to US interests and willingness to assist.

Darién Province seems certain to continue to present problems for Panama's government but without affecting the canal's security and operations any time soon. The security situations in Darién and San Blas Provinces will remain a challenge for Panama and its citizens there.

Former National Police Director José Luis Sosa rebuked SOUTHCOM officials for being overly concerned with a problem that has gone on for 40 years: "[W]e now have many Darién experts who have discovered the wheel." The country has successfully ignored the problem to avoid conflict with the FARC, AUC and the Colombian military—and to avoid intervention by the United States. This policy will likely continue, whatever the strength of the new national security plan, but Darién will be hard to keep on the back burner when the kettle boils over in Colombia.

Meanwhile, as US joint forces stand ready should a significant threat to the canal arise, no such crisis is on the horizon. Rather, Panamanians will prefer security assistance, counterdrug cooperation and law enforcement training and assistance as the US vehicles for cooperative engagement with the republic. **MR**

NOTES

1. General Charles E. Wilhelm, US Marine Corps, Commander-in-Chief, US Southern Command, "Testimony before the Senate Armed Services Committee," Washington, DC, 22 October 22, 1999, Internet site http://www.state.gov/www/policy/remarks/1999/991022/ wilhelm panama.html>, accessed 21 March 1999. 2. US State Department, Bureau of Western Hemisphere Affairs, "Background on Panama Canal Transfer," Internet site at http://www.state.gov/www/regions/wha/panama/991207 fs pancanal.html>, accessed 23 March 2000.

3. Ortega Luna, "Government Minister on Plans to Abort Security Plan," El Panama America, 19 February 2000, FBIS LAP20000219000014.

4. Mark Falcoff, Panama's Canal (Washington: AEI Press, 1998), 46. Falcoff reports on a 1992 study effort with Richard Millet which found that "40 percent of Panamanians in urban areas were unemployed or underemployed (45 percent in rural areas). More than half between the ages of 15 and 24 were unemployed and two-thirds of those had even given up looking for work. Three of eight Panamanians were determined to live in poverty... [and] ... income disparities in Panama were among the highest in Latin America."

5. Ibid.

6. "Meacas Premices to Panal Markett Latin Library" Courter Communication."

5. Ibid.
6. "Moscoso Promises to Repeal Harmful Legislation," Caribbean and Central American Report, Latin American Newsletters, 28 September 1999, rc-99-08, Internet sit at http://www.latinnews.com/, accessed 1 October 1999. "The outgoing... administration of President Balladares made its attitude clear by wiping out the memories of the computers of the presidency and several ministries."
7. US States Department, Bureau for International Narcotics and Law Enforcement Affairs, International Narcotics Control Strategy Report, 1999 (Washington: US State Department, March 2000), Internet site at https://www.state.gov/www/global/narcotics.law/1999 narc_report/camex/99 part3.html>. In 1999, Panamanian authorities seized 2,576 kilograms of cocaine, 1,558 kilos of marijuana, and 46 kilos of heroin.

US State Department, March 2000), Internet site at <a very www.state.gov/www/global/narcotics_law/1999_narc_report/camex99_part3.html>. In 1999, Panamanian authorities seized 2,576 kilograms of cocaine, 1,558 kilos of marijuana, and 46 kilos of heroin.

8. Ibid.

9. "Colón Free Zone, Commercial Showcase of the Continent," The Complete Guide to the Colón Free Zone, Panama, Internet site at http://www.colonfreezone.com/>, accessed 28 March 1999.

10. US State Department, Bureau of Western Hemisphere Affairs, "Background Notes: Panama," January 2000, Internet site at http://www.state.gov/www/background_notes/panama_0100_bgn.html>, accessed 23 March 2000.

11. Glenn Garvin, "Canal Deal Gives Strategic Edge to China, Critics Charge China-Panama Canal Deal Draws Scrutiny," Miami Herald, 25 August 1999. According to Garvin, "Li and his business empire are linked to several companies known as fronts for Chinese military and intelligence agencies. One of the companies has been indicted for smuggling automatic weapons into the United States.

■ Li has also been accused of helping to finance several deals in which military technology was transferred from American companies to the Chinese army," Also see Congressman John L. Mica, US House of Congress, "China's Interest in the Panama Canal," Speech Before Congress, 27 April 1999, Internet site at http://www.cox.house.gov/mica/hdactive.jpg-, accessed 7 November 1999. Mica asserts: "Hutcheson has worked closely with the China Ocean Shipping Company, COSCO.

■ COSCO, you may remember is the PLA, and the PLA is the Chinese Army, PLA-controlled company that almost succeeded in gaining control of the abandoned naval station in Long Beach, California.

12. "Balancing the China Connections, Concern in US Congress at Growing Influence of Peking," Caribbean and Certar American Report, Latin American Newslet

a los requisitos y condiciones que establezcan esta Constitucion, la ley y su Administración."

15. Zhu Bangzao, Chinese Foreign Ministry, "Spokesman Denies PRC Attempting To Control Panama Canal," Beijing Xinhua (New China News Agency, China's official English-language), FBIS FTS20000113000488. Conversely, the Washington Times cited declassified Army and Defense Intelligence Agency documents (obtained by Judicial Watch under the Freedom of Information Acf) that conclude that Li Ka-shing was planning to take over operation of the Panama Canal. The report is said to conclude that Chinese intentions with the Canal are strategic and ralso a means for outside financial opportunities for the Chinese government." Also see Bill Gertz, "Chinese Businessman Eyed Canal Control, Pentagon Says," Washington Times, 5 April 2000, 3

16. "Population Patterns," Panama Country Handbook, Marine Corps Intelligence Agency (with permission), February 1999, Intranet site at http://www.mcia.osis.gov/new/products/handbook/, accessed 24 March 2000.

17. General Charles Wilhelm, "Testimony before the Senate Armed Services Committee." Panama offers China another way to penetrate US and Latin American markets, maneuver around government tariffs and other restrictions. For example, raw materials and components might be shipped through the Colón Free Zone to Manaus, Brazii, sneakers assembled there can be shipped for retail sales

in Rio De Janeiro and Sao Paulo. Currently Miami, Florida is the main port of entry for "back door" marketing in the US, but increased capabilities in Panama offers China the opportunity to exploit ports at the US southwest border and west coast. 18. "Guan Yanzhong, International Forum," Beijing Renmin Ribao, (People's Daily, newspaper of the CPC Central Committee) 30 June 1999, FBIS FTS1999063000579. This article and others in Panama respond to General Charles E. Wilhelm's assessment to the Senate Foreign Relations Committee, 22 June 1999, It caused some consternation in Panama. He said, "I have concerns about the ability of local security forces to deal with the security challenges that confront Panama. The Panamanian Public Forces are neither organized nor equipped to deal with incursions by Colombian insurgents into the Darien and San Blas Provinces. The Maritime Service has already expressed reservations about their capabilities to provide for canal security requirements and we have detected recent indications of an upsurge in drug trafficking in and around Panama."

19. "Roundup of Guerrilla Activities in Darien," Panama City Telemetro Television Network, 24 November 1997, FBIS FTS 1997112701282.

20. Juan Manuel Diaz, "Ports Said Being Used for Arms Trafficking From Central America," El Panama America, 16 November 1999, FBIS FTS 19991116000234.

Also see Goris Armando Gomez, "Panama Investigates Gunrunning at Costa Rican Border," La Prensa (Panama City), 15 December 1999, FBIS FTS 19991215001964 21. Boris Armando Gomez, "Panama Investigates Gunrunning at Costa Rican Border," 21 IS State Denatment Article II. Treaty Concerning the Permanent Neutral.

Border.

22. US State Department, Article II, Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal, in Texts of the Panama Canal Treaties with United States Senate Modifications, Internet site at <www.usia.gov/regional/ar/panama/freaty1.htm-, accessed 14 March 2000.

23. Ibid, Article IV as amended.

24. General Charles Wilhelm, "Testimony before the Senate Armed Services Committee."

24. General Charles Wilhelm, "Testimony before the Senate Armed Services Committe."

25. Hermes Sucre Serrano, "SPI Director on Preparations for Canal's Protection," La Prensa (Panama Citty), 3 January 200. FBIS FTS2000104000009.

26. "Panama: In the Jaws of War," Semana Magazine (Santa Fe de Bogota), 27 September 1999, FBIS FTS 1999030001940.

27. Mark Falcoff, Panama's Canal, 70. Falcoff writes that "[B]y the summer of 1997 the situation had become so serious that Panamanian authorities were granting permission for Colombian Army troops to camp in Darién Province and conduct operations against rebels who had take refuge there."

28. "President-elect. Foreign Minister on Guerrillas's Presence," ACAN (Panama City), 3 June 1999, FBISFTS19990603001293.

29. "Two Tourist Helicopters Hijacked in Panama, Passengers Released," Associated Press, 3 November 1999, Internet, Colombian Labor Monitor (list service), Internet site at <cli>Imperiment of the Panama City), 4 November 1999, FBIS FTS1999105001320.

30. In this incident, FARC strength was variously reported between 200 and 400 troops. See "Roundup of Rebel, Paramilitary Groups' Presence in Border," La Prensa, 29 May 1999, FBIS FTS 19990601001923.

31. Angel Sierra, "The Guerrillas in La Miel," Telemetro Television Network (Panama City), report series 31 May-2 June 1999, FBIS FTS19990605000011.

32. "Roundup of Rebel, Paramilitary Groups' Presence in Border," La Prensigente et Carreiron Minister on Guerrillas's Presence."

33. Ibid.
34. "President-elect, Foreign Minister on Guerrillas's Presence."
35. Jahiro Polo, "Police Confirm Shooting at Colombia-Panama Border," La Prensa (Panama City), 23 February 2000, FBIS LAP20000223000036. In "Panama, In the Jaws of War," Semana Magazine, 27 September 1999. The military presence on the border was reported: Panama, 1,500 men in five border posts with 1,500 more forthcoming as reinforcements; Colombia, 1,500 to 2,000 men in one navy brigade and three battalions.
36. "Panama," Country Profiles, United Nations High Commissioner for Refugees, Internet site at httm, accessed 29 March 1999.

1999.

37. "Panama: Some Colombians Return," Refugee NewsNet, United Nations High Commissioner for Refugees, Internet site at http://www.unhcr.ch/refworld/cgi-bin/newscountry.pl?country panama.htm, accessed 29 March 1999.

38. US Committee for Refugees, Country Reports "Panama," Internet site at www.refugees.org/world/countryrpt/amer_carib/panama.htm, accessed 29 March

On 39. "Telemetro Reports," *Telemetro Television Network* (Panama City), 23 November 1999, FBIS FTS19991124000836.
40. World Bank Group, Development Data, Internet site at http://www.worldbank.org/data/countrydata/aag/pan_aag.pdf, accessed 30 March 2000.
41. US State Department, Bureau for International Narcotics and Law Enforcement Affairs, *International Narcotics Control Strategy Report 1999*.
42. General Charles Wilhelm, "Testimony before the Senate Armed Services Committee"

43. US State Department, Bureau of Western Hemisphere Affairs, "Background Notes: Panama."
 44. "Panama, Central America, Nations/Alliances/Geographic Regions," Peri-

"Panama, Central America, Nations/Alliances/Geographic Regions," Periscope, Internet site at http://www.periscope.usni.com, accessed 3 April 2000.
 US State Department, Bureau for International Narcotics and Law Enforcement Affairs, International Narcotics Control Strategy Report 1999.
 "Panama, Central America, Nations/Alliances/Geographic Regions."
 Hermes Sucre Serano, "SPI Director on Preparations for Canal's Protection."
 Aristides Cajar Paez, "Minister Discusses Security Plan," La Prensa (Panama City), 24 February 2000, FBIS LAP20000224000025.
 "Police Chief Reacts to SOUTHCOM Chief's Statements," ACAN (Panama City), 24 June 1999, FBIS FTS 19990624001891.

Colonel William W. Mendel, US Army, Retired, is a senior military analyst, Foreign Military Studies Office, Fort Leavenworth, Kansas. He received a B.A. from Virginia Military Institute, an M.A. from the University of Kansas and graduated from Harvard's Kennedy School Program for Senior Officials in National Security. He is a graduate of the US Army Command and General Staff College and US Army War College. He held a variety of command and staff positions in the Continental United States, Europe, Korea and Vietnam and held the Maxwell B. Taylor Chair of the Profession of Arms at the US Army War College, Carlisle, Pennsylvania. His article "The Brazilian Amazon: Controlling the Hydra" appeared in the July-August 1997 issue of Military Review.

Montenegro's Tribal Legacy

Major Steven C. Calhoun, US Army

The mentality of our people is still very patriarchal. Here the knife, revenge and a tribal (plemenski) system exist as nowhere else. The whole country is interconnected and almost everyone knows everyone else. Montenegro is nothing but a large family— all of this augurs nothing good.

-Mihajlo Dedejic²

HEN THE MILITARY receives an order to deploy into a particular area, planners focus on the terrain so the military can use the ground to its advantage. Montenegro provides an abundance of terrain to study, and it is apparent from the rugged karst topography how this tiny republic received its moniker—the Black Mountain. The territory of Montenegro borders Croatia, Bosnia-Herzegovina, Serbia and Albania and is about the size of Connecticut. Together with the much larger republic of Serbia, Montenegro makes up the current Federal Republic of Yugoslavia (FRY).

But the jagged terrain of Montenegro is only part of the military equation. Montenegro has a complex, multilayered society in which tribe and clan can still influence attitudes and loyalties. Misunderstanding tribal dynamics can lead a mission to failure. Russian misunderstanding of tribal and clan influence led to unsuccessful interventions in Afghanistan and Chechnya.³ In Afghanistan, the rural population's tribal organization facilitated their initial resistance to the Soviets. In the early stages of the Soviet-Afghan War, the Mujahideen mobilized the Afghan population along tribal lines to defeat Soviet equipped and trained government troops.⁴ In Chechnya, the Russians overestimated the importance of the clan's role in Chechen society, which contributed to the Russian decision to intervene. 5 This article addresses the nature of the tribe (pleme) in Montenegro and how the tribe

The views expressed in this article are those of the author and do not purport to reflect the position of the Department of the Army; the Department of Defense or any other government office or agency.—Editor

Knowing the traditional territories of tribes that openly support the Belgrade regime could aid force protection measures in those regions. While armed conflict between Serbia and Montenegro is not a foregone conclusion, US Army planners should be aware of the cultural, political and tribal relationships in Montenegro and their potential impact on military operations in the republic.

fits into modern Montenegrin society.

Montenegro's 680,000 people are ethnically mixed. Citizens who identify themselves as Montenegrin make up an estimated 62 percent of the population. The largest minority are Slavic Muslims at 15 percent. People who identify themselves as Serbs make up slightly more than nine percent of Montenegro's inhabitants. A variety of other minorities in Montenegro include those identifying themselves as Yugoslavs, Albanians, Croats and several other Central and Southeastern European ethnic groups.6 The cities and towns around Montenegro indicate the country's ethnic diversity. For example, Montenegrins make up 77 percent of the population in the capital, Podgorica, but they share the city with a large Albanian minority of almost ten percent. Albanians are the majority in the southern town of Ulcinj, where they comprise 73 percent of the population. Play, a town near the border with Kosovo, has a population 52 percent Serb, 23 percent Montenegrin and 21 percent Albanian. Religious diversity also follows from the mix of ethnic groups in Montenegro. The majority of Montenegrins and Serbs are Eastern Orthodox. Some Slavs and Albanians are Muslim. Croats and another segment of the Albanian population are Roman Catholic. There are also small minorities of Protestants and Jews.⁷ The aggregation of groups in

Montenegro makes for a political landscape as variegated as the terrain.

In addition to sharing the ethnic and political cleavages inherent in the other parts of the former Yugoslavia, groups in Montenegro are also staking political positions along tribal lines. Open media sources have reported that "tribal assemblies" are convening in northern Montenegro. These assemblies have stated that if Montenegro declares independence from Yugoslavia, they will declare independence from Montenegro and remain part of Serbia. Some tribes have vowed to fight against Montenegrin secession.⁸

Opposite these tribes, a group calling itself the Montenegrin Liberation Movement (COP) has been conducting militia exercises in the hills surrounding the historic capital of Cetinje in preparation for a war of Montenegrin independence. The leader of the COP, Bozidar Bogdanovic, claims to command 20,000 armed men organized into three territorial groups. Bogdanovic says he is not working for Podgorica and, "If we are attacked, we will defend Montenegro regardless of what the authorities would say or do." There may have already been low-level clashes near Ivanova Korita, a town near Cetinje, between the COP and the federal Yugoslav Army stationed in Montenegro. 10

The fact that Montenegrin political demarcations occur not only along ethnic lines but also along tribal lines highlights the need for military planners to understand these tribes and their traditional territories. Knowledge of the political disposition of a particular area can aid in correctly positioning forces. For instance, knowing that the town of Kolasin is divided between pro- and anti-independence factions could help prevent a situation similar to that in Kosovska Mitrovica in Kosovo. Knowing the traditional territories of tribes that openly support the Belgrade regime could aid force protection measures in those regions. While armed conflict between Serbia and Montenegro is not a foregone conclusion, US Army planners should be aware of the cultural, political and tribal relationships in Montenegro and their potential impact on military operations in the republic.

Slavs, Serbs, Montenegrins

Understanding the relationship between Montenegro and its larger partner, Serbia, in the present Yugoslavia requires a proper historical context. Since 1998 the main causes for tension between the two republics have been the chauvinistic nationalism espoused by Slobodan Milosevic and the



Before its unification with Serbia,
Montenegro was a sovereign state. It had its
own king, its own history and its own culture. . . .
Some Montenegrins do identify culturally with
Serbs. Others, however, distrust Serbian
motives. As the remnants of the Serbian army
retreated to Corfu during World War I, it was
the Montenegrins who covered their retreat.
The Montenegrin saying that "the Serbs will
fight until the last Montenegrin dies," reflects
how Montenegrins still feel used by
their Serb brothers.

nationalized character of politics in the Federal Republic of Yugoslavia. The issue of the proper relationship between Montenegro and Serbia, though, is centuries old.

As close Balkan neighbors, Serbia and Montenegro share a similar, intertwined history. Montenegrins, however, consider themselves descendants of the first wave of Slavs to settle the Balkans in the 6th century, a century before the arrival of the Serbs and Croats. In the 9th century, these early Slavs formed the principality of Duklja,



Religious diversity follows from the mix of ethnic groups in Montenegro. The majority of Montenegrins and Serbs are Eastern Orthodox. Some Slavs and Albanians are Muslim. Croats and another segment of the Albanian population are Roman Catholic. There are also small minorities of Protestants and Jews. The aggregation of groups in Montenegro makes for a political landscape as variegated as the terrain

later referred to as Zeta, as a part of the Byzantine Empire. Duklja later won its freedom from Byzantium under King Vojislav. Duklja was a powerful state for a time, but its decline and the rise of the Serbian Nemanja dynasty saw its incorporation into the Serbian Empire. Zeta again regained its independent status around 1356. After gaining its independence, Zeta, Montenegro's forerunner, faced an even greater challenge as it fought to maintain its autonomy against the steady encroachment of the Ottoman Turks from the latter half of the 14th century. For 500 years Zetans and their Montenegrin descendants fought against the Turks to retain their freedom. The Montenegrins were largely successful in staving off the Turks, and as the Ottoman state declined in the latter half of the 19th century, Montenegro often fought along side Serbia to secure a greater share of the Balkans.

Most important, before its unification with Serbia, Montenegro was a sovereign state. It had its own king, its own history and its own culture. The last Montenegrin king, Nikola, was aware of the geostrategic role Montenegro played in the Balkans and adeptly used Montenegro's position to garner political, economic and military support from the Great Powers. As Europe marched toward World War I, Montenegro was an important player on the world stage in spite of her small size. When unification came between Montenegro and Serbia in 1918, it was unpopular among many Montenegrins, who saw it as little more than the Serbian annexation of a war-weakened neighbor. Adding insult to injury, Montenegro had entered the war on Serbia's side. Discontent with the unification eventually sparked a popular revolt known as the Christmas Uprising of 1919. The Serbs and their Montenegrin supporters, known as the "whites," crushed the open rebellion. While supporters of King Nikola, known as the "greens," continued a low-level guerilla campaign until

Stevo Vasiljevic, Montenegrin Orthodox Church



(Above) Bulatovic supporters gather in Pedgorica. (Right) Montenegrin police prepared for crowd control in Cetinie.

Weekend tribal assemblies have drawn from a few hundred to 2000 people. Usually, assemblies' participants are bussed in by Montenegrin opposition members supported from Belgrade. The President of the Montenegrin Parliament, Svetozar Marovic, though, realizes Montenegro still has a tribal spirit with which "one can mobilize thousands and thousands of people."



the whites eventually eliminated the resistance in the early 1920s.

Current tensions between Montenegro and Serbia unfold against this historical backdrop. The idea of a Montenegrin cultural identity distinct from that of the Serbs provides a convenient and popular symbol for rallying Montenegrins to the idea of national independence. Serbian and Montenegrin cultural identities, though, are not necessarily antithetical. Authors have written volumes analyzing where Serbian and Montenegrin cultures intersect and diverge. 11 Some describe the relationship of the Montenegrins and Serbs as "two eyes in the same head." Milija Komatina writes, "There was no initial question about the existence of a separate Montenegrin state after the union with Serbia in 1918. In fact, the Montenegrins considered themselves the 'most pure' of the Serbs."12 This notion of pure Serbdom in Montenegro stems from the centuries-long Montenegrin resistance to Ottoman Turkish rule. In the eyes of the Montenegrins, Serb culture remained preserved in the highlands during the period of Turkish occupation of Serbia.

Some Montenegrins do identify culturally with Serbs but see themselves as braver and more heroic than their lowland cousins. Other Montenegrins, however, distrust Serbian motives. As the remnants of the Serbian army retreated to Corfu during World War I, it was the Montenegrins who covered their retreat. The Montenegrin saying that "Serbs will fight until the last Montenegrin dies," reflects how Montenegrins still feel used by their Serb brothers.¹³ Finally, at the other end of the spectrum are those who harbor resentment toward the Serbs for what they believe was the unlawful annexation of the Montenegrin nation in 1918 and its repression by Serb authorities. In Montenegro, whether one is a Serb, a Montenegrin or both can be a source of open debate.

Marked similarities and important differences distinguish the two cultures. Both Serbs and Montenegrins are Orthodox Christians, but in 1920 the Serbian Orthodox Church revoked the autocephalous status of the Montenegrin Orthodox Church. In 1993 some members of the Montenegrin Orthodox Church reasserted the autocephalous status of their church, but its validity is still contested by the Serbian Orthodox hierarchy who have charged that a separate Montenegrin Church represents a heretical schism. Montenegro and Serbia both use the Cyrillic alphabet; but unlike Serbia, Montenegro treats the Latin alphabet equally with the Cyrillic. Both Serbs and Montenegrins speak mutually intelligible dialects of Serbian-Croatian. Montenegro is also unique in that it developed a tribal society which was quite different from society in Serbia. These deep tribal roots continue to influence Montenegrin attitudes.



Montenegro developed into what noted ethnographer and historian Christopher Boehm has called a "refuge-area warrior society." This formally lasted until the mid-19th century when the prince-bishop (vladika), the nominal head of state, began to implement a government based on state institutions and a central authority rather than a state based on the tribal hierarchy.

The Tribe as it Was

Tribal society in southeastern Europe formed in Montenegro, Herzegovina, northern Albania and part of the Sandzak. Montenegro, though, was the only place where the tribe was the basis of the state. Tribes continue to be composed of clans (*bratstva*) which are usually related patrilineally by blood. ¹⁴ Scholars believe that the tribal framework in Montenegro developed from the fall of the medieval state of Zeta to the Ottoman Turks. Tribes organized blood-related clans in distinct geographic regions as a defense mechanism against encroaching Turkish armies. ¹⁵

The development of tribal society effectively defended this mountainous region and the Ottomans never completely subjugated the heart of Old Montenegro centered around the ancient city of Cetinje. Serbs who fled Ottoman rule often found refuge in the Black Mountains of northeastern

Petar II, Petrovic Njegos, Prince Bishop of Montenegro from 1830. Petar II wrote *The Mountain Wreath*, considered by many to be the epitome of Serbian literature, and worked to centralize the Montenegrin state administration.

Montenegro and adopted the tribal way of life. The tribe, then, became the basic building block of Montenegrin national self-consciousness. Resistance to the encroaching Turks fostered a wider sense of community and a common ethnic identity among the Montenegrin tribesmen. The idea of a common clan ancestor developed along with a strong oral tradition which passed down tales of heroic resistance to the Turks. 16 Montenegro developed into what noted ethnographer and historian Christopher Boehm has called a "refuge-area warrior society." This formally lasted until the mid-19th century when the prince-bishop (vladika), the nominal head of state, began to implement a government based on state institutions and a central authority rather than a state based on the tribal hierarchy.¹⁷

Montenegro exhibited several characteristics essential for the success of a warrior refuge area.¹⁸ First, the land was of limited economic value. The barren terrain of the Black Mountains lacked significant timber stands or mineral resources. The low scrub and poor, rocky soil made a pastoral existence the best means of subsistence. Further, the rugged terrain provided distinct defense or escape advantages. Next, the Montenegrins developed a sophisticated organization—the tribe and its subunit, the clan. This social structure proved flexible enough for a variety of military actions from a small raid to a larger territorial defense involving thousands of warriors. The patriarchal and hierarchical leadership of clans and tribes also adapted well to military actions as the need arose. Further, Montenegrins valued their autonomy and had a highly developed sense of honor which committed them to defend their land rather than submit to Ottoman rule. At the same time, the fierce Montenegrin regard for personal honor and autonomy curbed the power of clan and tribal chieftains and continues in modern Montenegro.¹⁹

The influence of traditional tribal- and clan-based society remains in Montenegro, particularly in rural areas. Boehm spent several years studying tribal life in Montenegro and living with the Upper Moraca tribe in the northeastern part of the country. The state, in one form or another, had been working to undermine the authority of the tribe since 1850. However, Boehm comments, "[E]ven in 1966, when I left Montenegro, the tribe—rather than the village or settlement or even the Yugoslav national legal system—remained the chief moral reference point, the social unit in which a man's or woman's reputation as a good person was maintained or lost." The tribe, then, as late as 1966 still

heavily influenced people's lives even under communism. As a political entity, though, the tribe was relatively weak.

The tribe does not dominate politics in Montenegro as it did prior to 1850. In their heyday, clan and tribal assemblies decided all of the important questions of Montenegrin life. All of the male members of the population fit to bear arms participated in these gatherings, and their decisions were binding on all tribal members. Indeed, the punishment for disobedience could include isolation, persecution and even death. The tribe imposed sentence not only on the individual but also on that person's family. Even though the tribe no longer wields that kind of influence, people continue to identify with their tribal affiliation. Recently, weekend tribal assemblies have drawn from a few hundred to 2000 people. Usually, assemblies' participants are bussed in by Montenegrin opposition members supported from Belgrade.²¹ The President of the Montenegrin Parliament, Svetozar Marovic, though, recognizes the potential represented by the Montenegrin tribes. He realizes Montenegro still has a tribal spirit with which "one can mobilize thousands and thousands of people."22

Montenegro contains between 30 and 40 tribes (see map on page 33). Each tribe is associated with a particular region of the country, though with the population shifts following World War II, large numbers of people who can trace their ancestry to a particular tribe now live outside their traditional tribal areas. Roughly speaking, Montenegrin tribes fall into two categories. The Brda or Mountain tribes have traditional lands located northeast of the Zeta River. The Brda tribes consist mainly of immigrant Serbian clans who fled to Montenegro during the Ottoman occupation. There are eight Brda tribes: the Rovcani, the Upper and Lower Moraca, the Bjelopavlici, the Vasojevici, the Piperi, the Bratonozici and the Kuci.

The other group consists of the Old Montenegrin tribes whose traditional lands lie southwest of the Zeta. These Old Montenegrin tribes inhabit regions known as *nahije*. Some 20 tribes in four *nahija* make up the Old Montenegrin tribes. The members of the Old Montenegrin tribes trace their ancestry to either the ancient Illyrians who were later slavicized during the great Slav migration into Southeastern Europe or to the original Slavs who settled the area. He Old Montenegrin tribes are generally smaller and more numerous than the Brda tribes of the northeast. This division between the tribes has existed for centuries, but as with other his-

torical cleavages in the Balkans, politicians are using these divisions to further their own agendas.

The Tribe as it Is

Montenegrin opposition loyal to Belgrade and led by Yugoslav Prime Minister Momir Bulatovic's Socialist People's Party (SNP) sees the Brda tribes' historic connection to Serbia as a way to mobilize support in Montenegro. Unfortunately, as the SNP

The clan orientation of the vendetta is an aspect of the blood feud in both Montenegro and northern Albania. According to tradition, the wronged individual need not take his blood revenge on the one who insulted him. It is sufficient to murder another male of the wrongdoers clan, even if that person was not present when the offense took place.

and others stoke Serbian national feeling among the Brda tribes, they also exacerbate differences between the Mountain and Old Montenegrin tribes, between northeast and southwest. Evidence of a rift between these two regions in Montenegro is already present. The Brda tribes in the region to the northeast of the Zeta generally support continued unification with Serbia as part of Yugoslavia, while most Old Montenegrin tribes southwest of the Zeta favor Montenegrin independence. This is not a hard and fast rule. One exception is the Drobnjaci tribe which has declared its desire to remain part of Yugoslavia even if Montenegro declares independence. The Drobnjaci are an Old Montenegrin tribe, but their lands lie in the north of the republic near Herzegovina.

Often tribes support the political position of their favorite sons. Former Bosnian Serb leader Radovan Karadzic and former Yugoslav army colonel Veselin Sljivancanin, both indicted war criminals, are Drobnjaci. Serbian President Slobodan Milosevic is a member of the Vasojevic tribe. The Yugoslav Prime Minister Bulatovic as well as his viceminister, both Milosevic men, are Kuci. On the other hand, Montenegrin President Milo Djukanovic is a member of the Cuce, an Old Montenegrin tribe.

Montenegrin voting patterns reinforce the northeast-southwest split in the attitudes of the republican electorate. Voting results from the last presidential and parliamentary elections show support for the regime in Belgrade concentrated in the northern and northeastern parts of the republic. Among other Montenegrin President Milo Djukanovic (*right*) meets with Secretary of Defense William Cohen in Washington to discuss regional security issues, 4 November 1999.



Montenegrin voting patterns reinforce the northeast-southwest split in the attitudes of the republican electorate. Voting results from the last presidential and parliamentary elections show support for the regime in Belgrade concentrated in the northern and northeastern parts of the republic. Among other campaign issues, opposing platforms with regard to Podgorica's relationship with Belgrade marked the two main candidates, Bulatovic and Djukanovic.

campaign issues, opposing platforms with regard to Podgorica's relationship with Belgrade marked the two main candidates, Bulatovic and Djukanovic.

During the presidential campaign, former Montenegrin President and Milosevic supporter, Bulatovic attempted to portray the current president, Djukanovic, as an advocate of Montenegrin independence. Belgrade clearly supported Bulatovic during the elections, while Djukanovic ran on a reform-oriented and Western looking platform. Bulatovic received most of his votes in the northern and northeastern municipalities. In fact, most of the municipalities where Bulatovic received over 65 percent of the vote in the second round runoff against Djukanovic in October 1997 are in the northeast. Djukanovic found his base of support in the southwest while the center part of Montenegro returned mixed results. Djukanovic won the elections

in the second round, with only 51 percent of the vote.²⁵

Branko Banjevic, President of Matica, the Montenegrin Cultural Association, says that although local tribes changed with history, they always bore the responsibility for government in a unified Montenegro. He says attempts to use historical tribal traditions of brotherhood to divide Montenegro at some gatherings are degrading. Indeed, historically tribes did not go to war for political or ideological reasons. Most conflicts between tribes were over matters such as pasturage, livestock, water and honor. ²⁶ Clans and sometimes whole tribes resolved these conflicts through the vendetta.

Vendetta killings, or blood revenge, followed strict traditional rules. The blood feud was not necessarily an exchange of a life for a life. The killing sometimes started over a perceived slight to a man's honor or hospitality. The man who felt slighted might immediately or after a time murder the man who insulted him or another of his clan. This clan orientation of the vendetta is an aspect of the blood feud in both Montenegro and northern Albania. According to tradition, the wronged individual need not take his blood revenge on the one who insulted him. It is sufficient to murder another male of the wrongdoers clan, even if that person was not present when the offense took place. In this way, one can see how blood revenge could quickly escalate between clans and sometimes tribes. Still blood feuds usually remained limited in scope and although the death toll in these ongoing revenge killings could go quite high, they usually did not result in open warfare.²⁷ As late as the early 20th century, Milovan Djilas punctuated how compelling the need to take revenge could be to Montenegrins when he wrote:

"Vengeance—this is a breath of life one shares from the cradle with one's fellow clansmen, in both good fortune and bad, vengeance from eternity. Vengeance was the debt we paid for the love and sacrifice our forebears and fellow clansmen bore for us. It was the defense of our honor and good name and the guarantee of our maidens. It was our pride before others; our blood was not water that anyone could spill. It was, moreover, our pastures and springs—more beautiful than anyone else's—our family feasts and births. It was the glow in our eyes, the flame in our cheeks, the pounding in our temples, the word that turned to stone in our throats on hearing that our blood had been shed. It was centuries of manly pride and heroism, survival, a mother's milk and a sister's vow, bereaved parents and children in black, joy and songs turned into silence and wailing. It was all, all."28

Conflicts in the 20th century involving Montenegro have tended to cut across tribal lines. The conflict over unification between the greens and the whites following World War I split loyalties within tribes and clans. World War II and the three-way civil war in Yugoslavia between the Ustase, Chetniks and Partisans also cut across tribal boundaries. Some popular myths tend to portray these ideological struggles in a tribal vein, for instance that the Vasojevic tribe was "altogether Chetnik."29 The current confrontation between Montenegro and Serbia has already begun to split tribal loyalties. According to one report from the city of Kolasin, northeast of Podgorica, there are divisions between the "tribal assembly" and the "tribal forum" of the Rovci. Apparently, one part of the tribe supports Bulatovic while the other is firmly for Djukanovic.30 This indicates that the political support of a tribe may not be monolithic.

Authorities in Podgorica become concerned when even a portion of a

tribe wishes to remain part of Serbia. The Brda tribes could react as Krajina Serbs did in Croatia. That is, in the event that Montenegro declares independence from Yugoslavia, these tribes could declare their intention to remain in Serbia. They would likely take up arms to defend what they see as their right to remain in Yugoslavia. At the very least they would stage large demonstrations to protest Montenegrin independence. In either case, Djukanovic might use his Montenegrin Interior Ministry police to stop the tribes from seceding or to contain the demonstrations. Belgrade could seize either situation as an excuse for the Yugoslav Army to intervene. The North Atlantic Treaty Organization (NATO) and Western diplomats have made it clear that Yugoslav Army intervention in Montenegro could prompt a military response.

Should Montenegro be wracked by internal conflict, tribal custom might supercede the rule of law. Currently, the standoff over Montenegrin independence is between those who support Milosevic in Belgrade and supporters of Djukanovic in the Montenegrin capital of Podgorica. If these sides start fighting, the outcome is unclear. The Yugoslav Army would probably move to overthrow the cen-



The Brda tribes could react as Krajina Serbs did in Croatia. That is, in the event Montenegro declares independence from Yugoslavia, these tribes could take up arms to defend what they see as their right to stay in Yugoslavia. At the very least they would stage large demonstrations to protest Montenegrin independence. In either case, Jukanovic might use his Montenegrin Interior Ministry police to stop the tribes from seceding or to contain the demonstrations. Belgrade could seize either situation as an excuse for the Yugoslav army to intervene.

tral authorities in Montenegro. One need only look to northern Albania to describe a possible scenario for a lawless Montenegro. Currently, the government in Albania has little control over its northern territory. Consequently, criminal gangs have taken over and traditional blood feuds have resurged. The town of Shkoder in northern Albania has a reputation as one of the country's bloodiest places, and many of the murders committed there relate to blood feuds between clans.31 Montenegrin tribes are similar in structure and tradition to those of northern Albania. In the event of Montenegrin conflict and concomitant lawlessness, tribes might also band together to defend their territories and effectively establish their own tiny statelets in a balkanized Montenegro.

In addition to the diverse ethnic groups in Montenegro, the influence of tribal custom is another element that further confuses the complex situation in this small republic. As NATO attempts to implement a peaceful resolution to situations in Bosnia and Herzegovina and in the province of Kosovo, military planners must realize that this tribal heritage represents an entirely new set of variables for possible operations in Montenegro. While it is

impossible to say how much influence the tribe has on individuals, it is possible to determine the broad pattern of loyalties represented by each tribe. In

Conflicts in the 20th century involving Montenegro have tended to cut across tribal lines. The conflict over unification between the greens and the whites following World War I split lovalties within tribes and clans. World War II and the three-way civil war in Yugoslavia between the Ustase, Chetniks and Partisans also cut across tribal boundaries.

Montenegro a division between the tribes in the northeast and those in the southwest is clearly evident. The Brda tribes of the northwest have said that to them calls for Montenegrin independence are the same as calls to take up arms against Podgorica.³² Cetinje is at the center of Old Montenegro, and tribes there sympathize with the idea of Montenegrin independence.

Dedejic refers to Montenegro as a large family. Any conflict between Montenegro and Serbia could likely cut across tribal boundaries and make war in Montenegro one of the bloodiest in the Balkans since 1991. A struggle in Montenegro would be a true civil war where brother would fight brother.33 Armed conflict in Montenegro would prompt refugee flow into Bosnia and Herzegovina, Albania, Croatia and Italy. It would also mean some Montenegrins would flee the Balkans entirely, opting to live with relatives abroad in Europe and the United States. A breakdown in the central authority of the state might allow some people to revert to a more traditional type of justice based on tribal law and blood revenge. With about 40 tribes in Montenegro it is also conceivable that communities could balkanize completely and declare their own microstates. While this last possibility seems farfetched to a Western observer, the Balkans have defied conventional logic before. The tribal legacy in Montenegro is a dynamic for another round of Balkan conflict and foreign intervention relevant to NATO and US military planners. MR

NOTES

- 1. I have chosen to translate the word pleme as "tribe" and the word braststvo as "clan" for this article based on Christopher Boehm, Montenegrin Social Organization and Values: Political Ethnography of a Refuge Area Tribal Adaption (New York: AMS Press, 1983), 42 and 52.

 2. Bostjan Videmsek, "Mihajlo: Civil War Possible in Montenegro," Ljubljana Delo (Ljubljana), 15 January 2000; available from Foreign Broadcast Information Service (FBIS) [database on-line], accessed 3 March 2000, Document ID: FTS20000202000124. Controversy surrounds a separate Montenegrin Orthodox Church, has been excommunicated from the Serbian Orthodox Church and is one of the loudest voices espousing Montenegrin in Independence.

- Church and Dedejic, Metropolitan of the Montenegrin Orthodox Church, has been excommunicated from the Serbian Orthodox Church and is one of the loudest voices espousing Montenegrin independence.

 3. Anatol Lieven, Chechnya: Tombstone of Russian Power (New Haven: Yale University Press, 1998), 336.

 4. Ali Ahmad Jalali and Lester W. Grau, The Other Side of the Mountain: Mujahideen Tactics in the Soviet-Afghan War (Quantico: The US Marine Corps Studies and Analysis Division, 1995), 149-151.

 5. Anatol Lieven, Chechnya: Tombstone of Russian Power, 338-339.

 6. These are people identifying themselves as Romanies (0.5 percent), Macedonians (0.17 percent), Hungarians (0.03 percent), Slovaks (0.2 percent), Bulgarians (0.0075 percent), Ruthenians (0.0042 percent), and Vlachs (0.0005 percent), Turks (0.0046 percent), Ruthenians (0.0042 percent) and Vlachs (0.0005 percent).

 7. Statistics derived from Montenegro Population and Demography, unclassified, Military Geography Division, Office for Joint Warfare Support, Transnational Warfare Group, Directorate for Intelligence Production, Defense Intelligence Agency, May 1999.

 8. Mila Radunovic, 'Izmedju Mita I Politike," (Between Myth and Politics) Reporter, Internet. http://www.reporter.co.yulrep78/0005s.htm; accessed 6 March 2000.

 9. "Montenegrin Paramilitary: 'FRY Army' Occupying Force," "SR/M (Bijeljina), 6 November 1999; available from FBIS [database on-line], accessed 14 March 2000, Document ID: FTS19991108000863.

 10. Sonja Radosevic, "Liberation Movement' Prepares for War Against Serbs," (Vesti (Red. Vish) 8. November (1909); available from FBIS (database on-line).

- 2000, Document ID: FTS19991106000863.

 10. Sonja Radosevic, "Liberation Movement' Prepares for War Against Serbs," Vesti (Bad Vibel), 8 November 1999; available from FBIS [database on-line], accessed 14 March 2000, Document ID: FTS19991110001355.

 11. Here I rely on Millija Komatina's work cited later as well as Dr. Novica Rakocevic's Politicki Odnosi Crne Gore i Srbije 1903-1918 (The Political Relations of Montenegro and Serbia 1903-1918) (Cetinje: Obod, 1981); and Jagos Jovanovic's Stvaranje Crnogorske Drzave i Ravoj Crnogorske Nacionalnosti: Istorija Crne Gore od Pocetka VII Vijeka do 1918 godine (The Creation of the Montenegrin State and the Development of Montenegrin Nationalism: The History of Montenegrin from the Beginning of the 17th century until 1918) (Cetinje: Narodna Knjiga, 1948).

 12. Milija Komatina, Crna Gora I Srpsko Pitanje: Prilog Izucavanju Integrativnih Tokova (Montenegro and the Serbian Question: A Contribution to the Study of Integrative and Disintegrative Currents) (Belgrade: Inter Ju Press, 1966), 171.

- 13. Blaine Harden "Playing Chicken With Milosevic," New York Times Magazine,
- 25 April 1999, 38-41. 14. Singular: *bratstvo*.
- 15. Enciklopedija Jugoslavije (The Encyclopedia of Yugoslavia), 2nd ed., under
- 17. Christopher Boehm, *Blood Revenge: The Anthropology of Feuding in Montenegro and Other Tribal Societies* (Lawrence: University of Kansas Press, 1984), 41.
- . Ibid. Christopher Boehm, Blood Revenge:
 Montenegro and Other Tribal Societies, 41-42.
 Ibid., 46. The Anthropology of Feuding in
- 21. Anna Husaraka, 'Balkanization? You just wait As part of Montenegro races back to the past, the return of clan gatherings. This isn't funny," Newsweek International, 8 November 1999, 2.
- 22. Mila Radunovic, "Izmedju Mita I Politike" (Between Myth and Politics) Reorter, Internet: http://www.reporter.co.yu/rep78/0005s.htm; accessed 6 March

- 2000.
 23. Pronounced NA-he-yeh. Singular: nahija.
 24. Christopher Boehm, Blood Revenge: The Anthropology of Feuding in Montenegro and Other Tribal Societies, 42-43.
 25. The Results of the Second Round of Presindential [sic] Election in Montenegro, Montenet, 19 October 1997 [database on-line]; available from http://www.montenet.org/Innews/results2.htm; Internet, accessed 26 April 1999.
 26. Mila Radunovic, "Izmedju Mita I Politike" (Between Myth and Politics).
 27. Milovan Djilas, Land Without Justice (New York: Harcourt Brace Jovanovich Inc. 1958).
- Inc., 1958), 107.
 28. Christopher Boehms, Montenegrin Social Organization and Values: Political Ethnography of a Refuge Area Tribal Adaption (New York: AMS Press, 1983); and Blood Revenge: The Anthropology of Feuding in Montenegro and Other Tribal Societies (Lawrence: University of Kansas Press, 1984), cited earlier in this article are excellent resources explaining why and how feuding took place in pre-
- article are excellent resources explaining why and now reuding took place in pre-1850 Montenegro.

 29. Mila Radunovic, "Izmedju Mita I Politike" (Between Myth and Politics).

 30. Sead Sadikovic, "Zapis Sa Sjevera: Kolasin Podjeljeni Grad (A Report From the North: Kolasin A Divided City)," Monitor, Internet: http://www.monitor.cg.yu/ a 485_07.html; accessed 6 March 2000.

 31. Scott Anderson, "The Curse of Blood and Vengeance," New York Times
- Magazine, 26 December 1999.

 32. Mila Radunovic, "Izmedju Mita I Politike" (Between Myth and Politics).

 33. Bostjan Videmsek, "Mihajlo: Civil War Possible in Montenegro," *Ljubljana Delo* (Ljubljana)

Major Steven C. Calhoun is a foreign area officer with the Foreign Military Studies Office, Fort Leavenworth, Kansas. He received a B.S. from the US Military Academy and an M.A. from the University of Kansas. He has held a variety of command and staff positions, including commander, Headquarters and Headquarters Company, 5th Battalion, 158th Aviation Regiment, Giebelstadt, Germany; commander, Eagle Flight Detachment, Operation Provide Comfort, Divarbakir, Turkey; XO, C Company, 6th Battalion, 159th Aviation Regiment, Giebelstadt; and flight operations officer, 1st Squadron, 10th Cavalry Regiment, Fort Carson, Colorado.

A CONSTITUTE OF SECURITY OF INTERNAL SECURITY

Graham H. Turbiville, Jr.

ILITARIES around the world are restructuring in response to new operational environments that blur distinctions between national security and public safety. More often than not, force restructuring efforts are carried out under severe resource constraints and amid complex legal and human rights issues generated by broadened civilsupport missions. South of the United States in Mexico, a new force—composed of police, military and national intelligence components—has formed and expanded since the concept was first proposed in late 1998. This new organization the Federal Preventive Police (Policia Federal Preventiva or PFP)—has acquired the mandate, resources and missions to transform the way Mexico deals with its most pressing security concerns.

Mexico's growing and often violent security challenges—drug trafficking, illegal alien smuggling on land and maritime borders, violent street crime, other organized crime and proliferating armed guerrilla groups and their activities—have been well documented.¹ Since even Mexican officials characterize law enforcement establishments at federal, state and local levels as demonstrably corrupt and inefficient, the Mexican government has turned increasingly to the armed forces to lead and man key police organizations around the country. These duties distract the military from its main missions—including dealing with insurgent activities in a growing number of Mexican states—and bringing soldiers of all ranks into increasingly direct contact with the corrupting influence of narcotrafficking in its most pernicious forms.

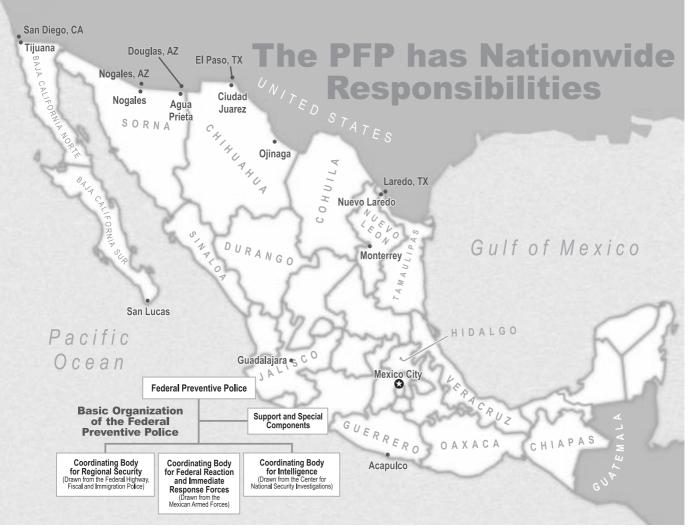
The far wider deployment of Mexican army units conducting counterdrug and illegal immigrant patrols close to the US-Mexican border also surfaced a longstanding concern of US border law enforceInitial criticism of the new PFP focused on fears of a politically motivated national police that would intimidate government opponents and collect political intelligence. However, a new concern quickly replaced that criticism when it was announced that the new police body would immediately be reinforced by the 4,899 soldiers, 1,862 weapons, 352 vehicles and 99 dogs of the 3rd Military Police Brigade.

ment. On 14 March 2000 US Border Patrol agents encountered a Mexican army patrol in high mobility multipurpose wheeled vehicles (HMMWVs) that crossed into an area near Santa Teresa. New Mexico, and fired two shots when challenged by US agents.2 While there were no injuries, and the soldiers were eventually detained and returned to Mexico, the incident marked another benchmark in border confrontations. In addition, using the Mexican military in most varieties of law enforcement has brought charges of military abuses and the overall "militarization" of Mexico's judicial system. Many have demanded that the military withdraw from some of these duties. Nevertheless, the Mexican government faces serious and growing security problems and requires an uncorrupted force possessing the strength and law-enforcement, intelligence gathering and legal skills to handle problems beyond the scope of normal police establishments. Mexican authorities are relying heavily on the new PFP, an organization based on a carefully considered concept.

Organizing and Fielding the PFP

One of the most ambitious new law enforcement initiatives developed at the end of the century by the Mexican government is being implemented under

The views expressed in this article are those of the author and do not purport to reflect the position of the Department of the Army; the Department of Defense or any other government office or agency.—Editor



The PFP will not reach its full strength and capabilities until 2015. The road to that goal will see the current 11,000-man PFP force grow initially at the rate of about 1,000 new officers a year, reaching an end strength of 15,000 to 20,000 personnel. The new officers will be trained at the PFP academy that began operating in late November 1999.

President Emesto Zedilo's "National Crusade Against Crime and Delinquency." Under this effort—after much contentious discussion—the Mexican senate legislated the PFP on 11 December 1998, calling for a national law-enforcement body to combine the functions and many of the personnel of the Federal Highway Police (*Policia Federal de Caminos*), the Federal Fiscal Police (*Policia Fiscal Federal*) and the Federal Immigration Police (*Policia Migratoiria Federal*). It was announced shortly thereafter that the resulting PFP would also include strong military and intelligence components.³

The PFP was made subordinate to the Interior Ministry—at the time under current presidential candidate Francisco Labastida Ochoa—and began to organize early in 1999. Its initial mission was to "safeguard the integrity and rights of persons, prevent the commission of crimes and preserve freedom, order and peace" nationally.⁴ Some 800 intelligence personnel were transferred from the Center

for National Security Investigations (*Centro de Investigaciones en Seguridad Nacional*—Cisen), Mexico's principal civilian intelligence agency that has been referred to as the Mexican CIA.⁵ Under the PFP, the Cisen contingent was redesignated the Directorate for Intelligence (*Coordinación de Inteligencia*).⁶

The first designated deputy commissioner of the PFP—within months named commissioner—was Rear Admiral Wilfredo Robledo Madrid, Cisen's former technical services and protection director. Robledo was best known for his association with the capture of kidnapper Daniel "El Mochaorejas" (the Ear-Cutter) Arizmendi, and quickly indicated his intent to use the PFP to stamp out kidnapping and "pay 'special attention' to trafficking in drugs, arms and people."

Initial criticism from forces opposing the decision focused on fears of a politically motivated national police that would intimidate government opponents and collect political intelligence. However, a new concern quickly replaced that criticism when it was announced that the new police body would immediately be reinforced by the 4,899 soldiers, 1,862 weapons, 352 vehicles and 99 dogs of the 3rd Military Police Brigade—the same unit that had been used during controversial patrols in Mexico City neighborhoods to combat violent street crime. Under the PFP, the military police were redesignated as the Directorate for Federal Reaction and Immediate Response Forces (Coordination de Fuerzas Federales de Reacción y Apoyo Inmediato).

In addition, a "special forces grouping" (un agrupamiento de Fuerzas Especiales) of unspecified origin but clearly a counterterrorist/hostage rescue unit was also added to the PFP. 10 The 3rd Brigade soldiers were to be on a leave of absence while with the PFP, with no timeline initially given for the duration of these duties.¹¹ It later became clear that these duties would be indefinite, and testing was began to vet military personnel fully for PFP duties before additional training and professionalization. In the meantime, they were to be under the direct command of a civilian PFP agent. 12 An unknown number of marines were also assigned to the PFP. By early September 1999, operations in a number of states indicated that PFP elements were clearly operational at some levels.13

These developments elicited the expected criticisms and denunciations, but none thus far has affected the decisions or their implementation. The PFP is certainly the Mexican government's chosen organization to bridge the gap between police and military forces. There is another idea, however, that continues to be raised. As early as September 1996, a group of PAN (Nation Action Party) senators, citing a provision in the constitution, proposed raising a "national guard" to deal with instability and violence. 14 After the PFP had achieved initial operational status, in early September 1999 the PAN president of the Senate Defense Commission. Norberto Corella Gil Samaniego, indicated that the PAN would propose removing the Mexican armed forces from missions that were not strictly military. Among those specifically named were "health projects, education, municipal patrolling and antidrug efforts." Responsibility for these duties would rest on the legally responsible agencies and organizations, and law enforcement duties would fall to the new national guard. 15 Given the momentum of PFP formation, the chances of any success for this proposal are slim—whatever its merits. Indeed, plans for further PFP development and specific in-



In addition to comprehensive PFP policing roles, the broad and specific intelligence gathering and counterinsurgency missions directly stated—as well as those demonstrated in the first months of PFP operations—underscore the wide powers of the new force and the complex security issues it faces.

tentions and missions were sent out late in fall 1999.

According to the timetable presented by Madrid, the PFP will not reach its full strength and capabilities until 2015. The road to that goal will see the current 11,000-man PFP force grow initially at the rate of about 1,000 new officers a year, reaching an end strength of 15,000 to 20,000 personnel. The new officers will be trained at the PFP academy that began operating in late November 1999. PFP Commissioner Wilfredo Robledo Madrid restated his belief that the PFP would be a "force of excellence" in about 10 years but still require additional time to take over law enforcement in federal areas that he said had "really been abandoned"—a candid admission that helps explain the sustained growth of violent, organized criminality

According to some observers, Mexico's counterdrug path would be similar to that of the Colombian National Police with a focus on attacking the weakest and most visible points of the cartels' structure. The idea would be to be to disrupt and dismantle the base of the drug triangle, rather than focusing solely on the top cartel leaders. The concept's compatibility with US approaches was considered problematic.

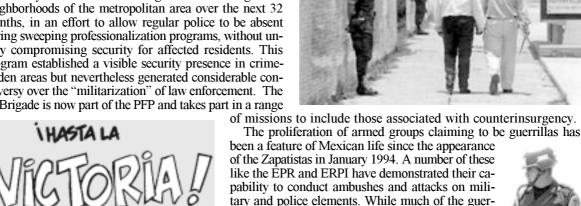
that threatens Mexican stability.

Financing the force will be a key factor in its eventual success. In January 2000, some officers and other officials were still being paid by their original organizations. This problem will likely resolve as the year progresses, since the PFP budget has nearly doubled from its 1999 level. 17 A key part of PFP professionalization will be the struggle against corruption, and the force is being organized with a strong internal affairs component.¹⁸

Robledo made it specifically clear that the PFP was "to take over all of the preventive and policing functions that are currently performed by members of the armed forces and some members of the PGR (Procuraduría General de la República—Office of the Attorney General of the Republic)."19 While public statements on PFP's policing roles were seemingly comprehensive, not as much was initially said about the intelligence gathering roles (performed by Cisen) that the PFP clearly had acquired. nor about the role that the PFP was clearly playing in national counterinsurgency activities. However, the broad and specific missions directly stated—as well as those demonstrated in the first months of PFP operations—underscore the wide powers of the new force and the complex security issues it faces:

Military Police Assume PFP Roles

The 3d Military Police Brigade was used prominently in the mid-late 1990s to conduct anticrime duties in Mexico Federal District neighborhoods. During this period, deployments began in the 1.4 million-resident Iztapalapa section of the greater Mexico City area. Troops were to rotate every 2-3 months through the 16 designated neighborhoods of the metropolitan area over the next 32 months, in an effort to allow regular police to be absent during sweeping professionalization programs, without unduly compromising security for affected residents. This program established a visible security presence in crimeridden areas but nevertheless generated considerable controversy over the "militarization" of law enforcement. The 3d Brigade is now part of the PFP and takes part in a range





Mexico" has recently appeared. The Villista Front for National Liberation (Frente Villista de Liberación Nacional—FVLN), asserts that it is not an armed group but rather speaks in behalf of an agenda demanding a broad range of reforms and a "new popular transitional government in Mexico." The accompanying poster art-

rilla activity has been centered in the southern and southeastern states of Mexico, an organization claiming to "represent the forces of the people's insurgency for national liberation in the north of

with stylized M-16 and AK-47 held by the female and male guerrillas—appears on the FVLN website at http://www.geocities. com/CapitolHill/1932/>.

- Combat organized crime and crimes that threaten national security through investigation and direct police actions.
- Prevent crime in/on federal facilities to include highways, railways, maritime ports, airports and other federal property.
- Carry out customs policing and investigation responsibilities.
 - Maintain and restore public order.
- Wage a multifaceted struggle against drug trafficking.
- Police Mexican borders to control illegal immigration, smuggling and abuses against immigrants.
- Rescue hostages and kidnap victims, and seize facilities held by illegal groups.
 - Police key federal natural resource areas.
- Collect and act on intelligence dealing with subversive groups and activities to include guerrillas, terrorists and other illegal paramilitary formations.

Some specific illustrations of PFP activities around Mexico indicate the central roles that police, military and intelligence components are playing in their new national security and public safety responsibilities.

Drug Trafficking, Organized Crime and Preventive Policing

Early in 2000, it was unclear just how active PFP elements would be in their diverse areas of responsibility. Knowledgeable observers quickly concluded that the PFP represented "a radical turn" in Mexico's battle against drug cartels and noted that the PFP was taking on an enormous share of national counterdrug work together with the Army.²⁰ According to these observers, Mexico's counterdrug path would be similar to that of the Colombian National Police (PNC) with a focus on attacking the weakest and most visible points of the cartels' structure. The idea would be to be to disrupt and dismantle the base of the drug triangle, rather than focusing solely on the top cartel leaders. The concept's compatibility with US approaches was considered problematic. In any event, the Cisen and other investigative components of the PFP would play a central role in "issues of intelligence, information analysis and above all, detection of criminal organizations."21

Reports on PFP counterdrug activities certainly portray an organization actively engaged in drug interdiction, sometimes in conjunction with the army or other law enforcement organizations. For example, in early February 2000, the PFP, the army and the PGR seized a plane near Cuernavaca car-



Drug intelligence is also a central PFP function. For example, in November 1999 the PFP began a focused drug intelligence operation aimed at high-profile drug-trafficking regions like Baja, California, which is plagued by drug-related violence. A principal aim of these operations is identifying and tracking major drug cartel figures.

rying some 443 kilos of cocaine. PFP officers have recently moved into Sinaloa State, where 564 drugand organized-crime-related murders occurred in 1999 and where 52 people were killed in the first five weeks of 2000. The PFP is used to reinforce local law-enforcement agencies that have broken down or cannot meet their growing requirements. Drug intelligence is also a central PFP function. For example, in November 1999 the PFP began a focused drug intelligence operation aimed at high-profile drug-trafficking regions like Baja, California, which is plagued by drug-related violence. A principal aim of these operations is identifying and tracking major drug cartel figures.²²

Many PFP activities require interagency cooperation, as illustrated in a joint operation earlier this year. The PFP formed part of a 500-man group that included PGR agents, public safety officers and public prosecutors' agents under army coordination. The interagency task force was to conduct an armsconfiscation operation in Hidalgo where two villages had a longstanding feud over land, which periodically produced armed violence. Following an attack by one village upon the other, the task force deployed to Hidalgo, and following a sweep, arrested 189 villagers and referred 17 for trial. The task force seized 29 weapons (one AK-47), 500 rounds of ammunition, and army and police uniforms.²³

Within the PFP is an exceptionally active and widely publicized antikidnapping squad. For example, in March 2000 the PFP kidnapping unit, working with the Federal Judicial Police's "Yaqi" special police

Unlike Beta Groups, which continue to operate in a number of areas, this new PFP organization will evidently not have investigative authority but will play a major role in interdicting illegal crossers to the US from Mexico or Central America. This new program's extent is not yet clear. Apparently, however, the PFP in its various functions will come into direct contact with law-enforcement and military support elements on the US side.

group, captured the notorious and especially vicious kidnapper Marcos Tinco Gancedo, known as "El Coronel." He led five groups of kidnappers operating in several states and the Federal District and was one of Mexico's most-wanted criminals.²⁴

International crime in Mexico now involves the "Russian Mafia," a loose term describing organized crime that may be primarily Russian but also may include criminals from other former Soviet states and Eastern Europe. The PFP claims that "Russian" criminals are working with Mexicans and Canadians and have become major participants in prostitution in Mexico City, trafficking in women largely from Russia and Eastern Europe (Hungary and Slovakia). The scope of the activity can be seen in arrest statistics: dozens of such women were apprehended in the last several weeks of 1999 alone. The PFP is also investigating a Russian criminal presence at Mexico City's National Airport.²⁵

Among the varied duties falling to the PFP is the patrolling of federal areas with valuable natural resources. While undertaken at the request of the Mexican Office of the Federal Attorney for Environmental Protection (Profepa), the reasons for the PFP patrols and policing are several. On the one hand, they are intended to prevent environmental damage to sensitive areas, such as that caused by timber pirates. These areas also serve as refuges for drug traffickers. A foremost concern, however, is the high murder rate among patrolling Profera of-

ficers, who are untrained to deal with the areas' heavily armed criminals.²⁶

A Mexican Border Patrol?

The PFP acquired a number of border and portof-entry control functions when the organization was created, many associated with the duties of the police organizations it subsumed. Additional functions have been further identified as PFP responsibilities and missions have been more specifically elaborated. For example, the PFP dispatched agents to support immigration and contraband-control operations at Tijuana's main airport—some 40 to 50 officers per shift. Particularly notable, however, was the indication in late 1999 that some agents would be detailed to US-Mexican border patrol-duties in Baja, California. In that role, they would replace the elite Beta Groups there formed earlier from personnel in various agencies. Beta Group members are selected for their good personnel records, are better paid than police officers and are subject to strict codes of conduct. The manifest border dangers have brought calls for Beta Group reinforcement and better equipment, including body armor, and the PFP replacement elements are expected to be quite well equipped.²⁸

It became clear that the PFP was to constitute a new presence on many areas of the US-Mexican border. In December 1999 it was announced that three PFP border patrol units would begin operation in Sonora state near the border town of Agua Prieta (opposite Douglas, Arizona).²⁹ In late December 1999, a 24-man PFP border patrol unit—drawn from the military components of the PFP, began operating in the Ojinaga-Juárez border region of Chihuahua state, spanning Rio Grande areas opposite El Paso, Texas, and New Mexico. The unit had 12 patrol vehicles and was characterized as "similar to the US Border Patrol."30 Unlike Beta Groups, which continue to operate in a number of areas, this new PFP organization will evidently not have investigative authority but will play a major role in interdicting illegal crossers to the US from Mexico or Central America. This new program's extent is not yet clear. Apparently, however, the PFP in its various functions will come into direct contact with lawenforcement and military support elements on the US side. The PFP may eventually replace some of the Mexican military border presence.

Social Unrest

One of the most widely publicized PFP actions occurred early in February 2000 when Mexican authorities made the decision to retake portions of the

campus at the Autonomous University of Mexico (UNAM) from strikers who had occupied campus buildings during the previous 10 months. The occupation of campus facilities began as a protest against a large tuition increase, but was soon accompanied by "plunder, theft, holding people captive, mutiny, injuring others and damaging university assets."31 When faculty and students attempted to return to occupied campus areas late in January, members of the radical General Strike Council (CGH) attacked and injured 37 strike opponents. On 1 February hundreds of PFP military riot police (from the former 3rd Military Police Brigade) and explosive specialists broke through the barricades, evicted and arrested several hundred strikers, and seized homemade bombs over a 10 hour period.³² Five days later the PFP, the PGR and Federal Judicial Police cleared remaining UNAM campus facilities at other locations and executed hundreds of arrest warrants in a remarkably well done and peaceful operation by 2,500 PFP personnel. Overall, the operations were supported by most Mexicans, although some sharply criticized the government.³³ The PFP and other agencies sought to dispel widespread fear that the strike had provided the opportunity for guerrillas such as the Popular Revolutionary Army (Ejército Popular Revolucionario-EPR) and (Ejército Revolucionario del Pueblo Insurgente— ERPI) to establish a stronger urban presence in Mexico City.³⁴ However, recent guerrilla attacks in the Mexican capital suggest that the EPR, ERPI and other groups may have successfully transitioned from insurgencies based in remote southern states to urban presences capable of at least nuisance attacks on military and police facilities.

Counterinsurgency and Counterterrorism

A noted opposition commentator and harsh critic of the Mexican government, Carlos Ramirez has recently criticized the Cisen's failure to track real subversive groups, while performing illegal domestic political intelligence duties on behalf of the Institutional Revolutionary Party (PRI).35 Despite his assertion, the Cisen elements transferred to the PFP now intensely track activities of the primary guerrilla groups. These groups include the most publicized Zapatista National Liberation Army (Ejército Zapatista de Liberación Nacional-EZLN), and the smaller, more dangerous and militarily active EPR and ERPI. Other groups have announced their existence as well, including the recently appearing Villist Revolutionary Army of the People (*Ejército* Villista Revolucionario del Pueblo—EVRP) and the



PFP agents in multiple states were being investigated for "crimes related to drug trafficking, illegal alien smuggling and stealing from transport vehicles." Of these, the illegal alien smuggling case seemed to be the most extensive, potentially involving a national-level undertaking with participants from the PFP and other police agencies.

somewhat-older Revolutionary Armed Forces of the People (*Fuerzas Armadas Revolutionario del Pueblo*—FARP). The latter two have punctuated their presence with March 2000 attacks on PFP, Cisen and army facilities.³⁶

Amid these new developments, PFP roles in counterinsurgency have slowly emerged for public view. During its first year in 1999 a sizeable PFP force of several hundred conducted security operations purportedly aimed to protect Chiapas residents from violent assaults such as the massacre of 45 indigenous peasants in December 1997 at the Chiapas community Acteal. The Acteal massacre was perpetrated not by guerrillas but by paramilitaries with the complicity of local authorities—and has been followed by continued violence and assaults on a lesser scale.³⁷ The PFP, the army and other intelligence-gathering agencies are tracking EZLN leaders and activities. A large PFP contingent wearing black-and-gray uniforms, carrying assault rifles and deploying on the outskirts of Tuxtla Gutierrez—reportedly brought "squad cars, helicopters, armored vehicles and [unspecified] advanced weaponry" and were tasked to reinforce so-called "red centers" (focas rojas) where trouble was anticipated.³⁸ The PFP has also been patrolling roads

(sometimes in armored vehicles) in Guerrero and Oaxaca to prevent highway assaults. These are areas where the EPR and ERPI are especially active,

The PFP is making a serious effort to ensure that new recruits have the requisite levels of honesty and is rooting out corrupt serving officers. Reducing corruption clearly contributes to the 15-year time table for the PFP to reach its maximum capability, a more realistic estimate than some previous campaigns that projected short-term results.

and PFP agents and other personnel are frequently used to reinforce local authorities around the country when trouble is anticipated.

PFP agents clearly have a role in tracking down and arresting suspected insurgents and often are present when their arrests are publicized. In October 1999, for example, the PFP and the Guerrero Attorney General's Office jointly announced the capture of ERPI insurgents to include "Commandante Antonio" (Jacobo Silva Nogales), purported head of the organization. A particular interest, according to the PFP director, is the nexus between crime and the guerrillas. In this regard, the PFP thinks that kidnapping for ransom is a major undertaking of the EPR and ERPI, who support their operations with the funds.

The heart of the PFP counterinsurgency and counterterrorist operations lies with the Cisen components that were transferred to the new organization. This component actually formed in 1994 under Cisen as a response to the EZLN uprising in Chiapas. Initially designated the GAT—Gruppa Antiterrorista—it quickly helped integrate activities of the various security agencies. Weekly interagency meetings assessed strategic threats around the country, especially to key infrastructure targets from bombs and other attacks. As it grew and assumed new responsibilities, such as kidnappings, arms trafficking and organized crime, the GAT eventually became the Inter-Institutional Coordination Unit-GAT—or UCIDGAT as it became known in its Spanish acronym. That body transferred from the Cisen in 1999 and became the core of the PFP's subversive and criminal intelligence effort.⁴⁰

The PFP's antisubversive duties have made the new force a target. At about 0300 hours on 15 March 2000, the EVRP attacked PFP facilities in the Mexican Federal District with electronically

fired 60mm mortars. Two rounds were fired, damaging a PFP building and a similar attack occurred later against a military airbase. ⁴¹ Simultaneously, the PFP acknowledged the EPR and ERPI's presence in Mexico City. ⁴² These groups had expressed solidarity with UNAM strikers and stated their intention to disrupt the July 2000 presidential elections.

PFPCorruption

The past years have amply demonstrated that endemic corruption plagues every Mexican police establishment. From all outside appearances, the PFP is making a serious effort to ensure that new recruits have the requisite levels of honesty and is rooting out corrupt serving officers. This extraordinarily difficult undertaking is reflected in the current status of internal PFP investigations. Notably, by February 2000 PFP agents in multiple states were being investigated for "crimes related to drug trafficking," illegal alien smuggling and stealing from transport vehicles."43 Of these, the illegal alien smuggling case seemed to be the most extensive, potentially involving a national-level undertaking with participants from the PFP and other police agencies. Reducing corruption clearly contributes to the 15-year time table for the PFP to reach its maximum capability, a more realistic estimate than some previous Mexican anticorruption campaigns that projected short-term results.

Mexico is placing exceptional trust and weight on the performance and effectiveness of the PFP. It is no exaggeration to say that the law enforcement and internal security dimensions of Mexico's future stability are tied to the PFP's ability to perform critically important policing and security missions. At the same time, the PFP must be effective enough to free the military from highly visible public safety duties that erode its public confidence. Amid the challenges posed by a spectrum of criminal and subversive threats to Mexico, the PFP—like the military—will have to struggle successfully against the drug corruption that has crippled other federal, state and local police establishments in Mexico. In addition, the nature of PFP duties raises the specter of human rights violations in areas like Chiapas, Oaxac and Guerrero, an issue that the Mexican Government acknowledges but has yet to fully address.

The strong presence of the PFP along the US-Mexican border will place a premium on cooperation between US and Mexican law enforcement—particularly in light of incidents like the armed encounter earlier this year between a Mexican military counterdrug force and the US Border Patrol.

While the PFP is going to be essential for Mexico's future security, it is also very important to the United States. The PFP's failure to provide security will have grave US repercussions in the areas of drug trafficking, illegal immigration and the spillover of other criminal enterprise or even political violence. Of particular immediate concern is the threat of political violence in the upcoming July elections.⁴⁴ While guerrilla groups are not strong enough to challenge the government, recent events suggest that they might hinder a smooth electoral process. In all, PFP activities over the summer of 2000 may affect both Mexico and the United States, shaping the future direction of security cooperation. MR

NOTES

1. For a recent assessment of Mexican instability focusing on new insurgency developments, see Carlos Ramirez, "Multiple Instability Indications Cited," *El Universal*, 24 March 2000. See also Graham H. Turbiville, Jr., "US-Mexico Border Security. Civil-Military Cooperation," *Military Review* (July-August 1999), 29-39; and "Mexico's Other Insurgents," *Military Review* (May-June 1997), 81-89.

2. According to Mexican and US reporting, on the night of 14 March two Mexican army HMMVVs crossed the US border in New Mexico just west of El Paso,

Texas. When encountered by US Border Patrol personnel, one HMMVW crossed quickly back to Mexico. Two shots were fired from the other without effect; however, nine Mexican soldiers were subsequently detained by the Border Patrol. The nine soldiers—that Mexican authorities said were part of a newly-arrived counterdrug force not familiar with the border region—were eventually allowed to return to Mexico with their vehicle and arms. The incident was characterized by both sides as "unfortunate" or "regrettable," and clearly underscored the increasing dangers as unioriumate or regrettable, and cleanly underscored the increasing dangers of surprise encounters by armed groups that could be law enforcement, military, drug traffickers, illegal aliens, or local residents. For accounts and commentary from both sides of the border, see "Detiene la Patrulla Fronteriza a nueve soldados mexicanos," La Jornada, 16 March 2000; Nancy San Martin, "Top Brass Pays a Call on Ft Bliss," Dallas Morning News, 21 March 2000; STRATFOR, "Incident on the Border," 22 March 2000, received via Internet at URL < and El Universal, 17 March 2000, as translated in Foreign Broadcast Information Service (FBIS) LAP2000317000070. It may also be recalled that in November 1999, a US Ma-

LAP2000317000070. It may also be recalled that in November 1999, a US Marine was detained by Mexican authorities for two weeks in a Tijuana jail when he accidently crossed into Mexico with two privately owned firearms. See Tony Perry, "Marine Jailed in Mexico Is Released," Los Angeles Times, 17 November 1999.

3. Jorge Camargo, "Senate Approves PFP Legislation," Reforma, 12 December 1998, as translated in Foreign Broadcast Information Service (FBIS) FTS19981215001392. Under the PFP, the three police bodies became the Directorate for Regional Security (Coordinación de Seguridad Regional). See José Reveles, "Creceá hasta 20 mil elementos la Policia Federal Preventiva," El Financiero, 11 December 1999.

4. Francisco Labastida Ochoa, who is a presidential candidate for the July 2000 elections, was replaced in May 1999 by the former governor of Oaxaca and Labastida political supporter. Directory Carrasco, Altamirano, and the control of the control of the proporter Directory Carrasco, Altamirano, and the control of t

elections, was replaced in May 1999 by the former governor of Oaxaca and Labastida political supporter, Diodoro Carrasco Altamirano.

5. "Agentes del Cisen se integrarán a la Policia Federal Preventiva," La Jornada, 1 April 1999.

6. José Reveles, "Creceá hasta 20 mil elementos la Policia Federal Preventiva."

7. "Robledo on PFP Development Timeline," Reforma, 13 September 1999, as translated in FBIS FTS19990915001575.

8. "Riesgos de militarizar las policias," La Jornada, 9 July 1999; and José Reveles, "Crecerá hasta 20 mil elementos la Policia Federal Preventiva," El Financiaro 11 November 1909.

Financiero, 11 November 1999.

9. José Reveles, "Creceá hasta 20 mil elementos la Policía Federal Preventiva.

Jesús Aranda, "La Sedena apoyará a la Policía Federal Preventiva" La Jornada, 8 July 1999.
 "Terms of Sedena, PFP Transfer Cited," Reforma, 16 July 1999, as trans-

11. Terms of Sedena, PFP Transfer (fled, Reforma, 16 July 1999, as translated in FBIS FTS19990716001702.

12. "Details of Sedena—PFP Transfer," Reforma, 9 July 1999, as translated in FBIS FTS19990709001546; "Robledo on PFP Development Timeline;" and Hugo Martinez McNaught, "PFP Plans to 2015 Revealed," Reforma, 19 November 1999, as translated in FBIS FTS19991119001686.

13. Ignacio Juárez Galindo, "Trabajará en conjunto con diferentes corporaciones: En breve, la Policía Federal Preventiva iniciará actividades en Puebla," *La Jornada*,

1. September 1998. 1. Ismael Romero, "Guardia Nacional, Propone el PAN," *La Jornada*, 18 September 1996.

tember 1996.

15. Olga Valenzuela, "The PAN suggests that Federal Departments Should Fulfill Their Responsibilities," *La Jornada*, 4 September 1999, as translated by Leslie Lopez (Chiapas-L electronic message, 4 September 1999).

16. Hugo Martinez McNaught, "PFP Plans," Robledo indicated that in mid-November 1999 there were precisely 10,699 personnel already in the PFP.

17. "Federal Preventive Police Officials Fail Comptroller's Office," *Reforma*, 11 January 2000, as translated in FBIS FTS20000111001704. In 1999 the PFP was budgeted for 1,704 billion pesos, an amount that will increase to 3.104 billion pesos in 2000. See *Reforma*, 13 November 1999, as translated in FBIS FTS19991117001642. FTS19991117001642

18. To help screen new recruits and those police or military personnel assigned to the PFP from other agencies, PFP officers administer a 44-item questionnaire

that asks about attitudes to the formation of the PFP, willingness to take polygraph tests, past drug and alcohol use and sexual orientation. "Federal Preventive Police Hopefuls Tested," *Mural*, 22 January 2000, as translated in FBIS FTS20000124002017.

- 19. Hugo Martinez McNaught, "PFP Plans."

 20. Perspectives are those of PAN Senator Francisco Molina Ruiz, who once headed Mexico's now disbanded National Institute for Combating Drugs (INCD), the body principally charged with Mexican drug enforcement. See "Molina Concerns Over New Antidrug Tack," *El Universal*, 5 January 2000, as translated in FNIS FTS20000105001386.
- 21. Ibid.
 21. Ibid.
 22. "PFP To Fight Drug Trafficking in BC," *El Universal*, 25 November 1999, as translated in FBIS FTS19991126001375.

- translated in FBIS F1S19991126001375.

 23. Javier Peralta, "Move to Confiscate Arms in Hidalgo," *Reforma*, 28 January 2000, as translated in FBIS FTS20000129000527.

 24. "Most Wanted Kidnapper Arrested," *El Universal*, 29 March 2000.

 25. "Rusian Mafia Trafficking Women," *Reforma*, 19 December 1999, as translated in FBIS FTS19991220001664.

lated in FBIS FTS19991220001684.

26. "Federal Preventive Police to Patrol Areas Containing Natural Resources," El Universal, 18 February 2000, as translated in FBIS LAP2000218000064.

27. "PFP To Fight Drug Trafficking in BC."

28. A Grupo Beta Sur (South Beta Group) has also been established on Mexico's southern border in Chiapas. See Nancy Nusser, "Special Police Unit Aims to Crack Down on Illegal Migrant Abuse," Cox News Service, 23 November 1996, received via Internet, for more on the 35-man Grupo Beta Sur and its activities. Jorge Alberto Cornejo, 'Aplica México plan para proteger derechos de centroamericanos,' La Jornada, 23 May 1996.

29. "Federal Preventive Police Arrives in Agua Prieta," El Imparcial, 23 December 1999, as translated in FBIS FTS19991223001273.

30. Ruebén 'Villalpando and Jorge Cornejo, "Se ubica en la región de Ciudad Juárez y Ojinaga," La Jornada, 8 January 2000.

31. "Secretary, Attorney General on University Campus Takeover," XEW Television Network, 1519 GMT and 1556 GMT, 6 February 2000, as translated by FBIS FTS20000206001411.

TFS20000206001411.

32. "PFP Active in Retaking UNAM Preparatory," *Reforma*, 2 February 2000, as translated in FBIS FTS20000202001591.

translated in FBIS FTS20000202001591.

33. Among other voluminous reporting on these PFP operations, see Carlos Ramirez, "Aspects, Costs of UNAM Action Viewed," El Universal, 7 February 2000, as translated in FBIS FTS20000208000028, Alberto Martinez, Pablo Cesar Carrillo and Francisco Velazquez, "PFP Holding 3 Retaken UNAM Sites," Reforma, 27 January 2000, as translated in FBIS FTS20000127001699; and "FBIS Mexico Press Highlights," 7 February 2000, as compiled and translated in FBIS FTS20000207000842.

34. José de Cordoba, "U.S. Sees Rebels Posing a Threat to Mexican Vote," Wall Street Journal, 14 February 2000.

Street Journal, 14 February 2000.

35. Carlos Ramirez, "Misused Cisen Functions Claimed," El Universal, 30 March 2000, as translated in FBIS LAP20000330000075.

36. Carlos Ramirez, "Multiple Instability Indications," El Universal, 30 March 2000, as translated in FBIS LAP20000330000075.

37. Amnesty International, "Mexico: The Acteal massacre—one year on and still no justice," News Service: 248/98, Al INDEX: AMR 41/43/98, 18 December

"Hundreds of Federal Preventive Police Agents Arrive in Chiapas," La Jornada, 23 December 1999, as translated in FBIS FTS19991223001273.
 Luis Guillermo Hemandez, "ERPI Commander, Others Arrested 22 October," Reforma, 25 October 1999, as translated in FBIS FTS19991025001741

40. José Reveles, "Creceá hasta 20 mil elementos la Policia Federal Preventiva."
41. A reported attack—or attempted attack since the actual course of events is disputed by the military—was directed against the Santa Lucia Air Base, Mexico State. During the 17-20 March period, troops are thought to have found at least three explosive devices similar to those used against the PFP. The Villist Revolutimes explosive devices similar to tribos used against the FPF. The Villist Newton-tionary Army of the People (EVRP) reportedly claimed responsibility. See La Jornada 21 March 2000, as translated in FBIS LAP20000321000079. 42. Carlos Ramirez, "Multiple Instability Indications." 43. "Federal Preventive Police Agents Investigated," El Universal, 1 February 2000, as translated in FBIS FTS20000201001120. 44. A PAN victory in the election could well derail the PFP as well, since PAN political leaders have surrected that afterseting.

political leaders have suggested other alternatives

Graham H. Turbiville Jr. is the director, Foreign Military Studies Office, Fort Leavenworth, Kansas. He received a B.A. from Southern Illinois University, an M.A. From George Washington University and a Ph.D. from the University of Montana. He formerly served as chief of the Soviet/Warsaw Pact Strategic Operations Branch, Defense Intelligence Agency, Washington, D.C. His contributions to Military Review include "Operations Other Than War: Organized Crime Dimension," published in January 1994; "The Chechen Ethno-Religious Conflict, Terrorism and Crime," published in March 1994; "OOTW in the Asia-Pacific Theater," published in April 1994; "The Changing Security Environment," published in May-June 1997; and "Mexico's Other Insurgents," published in May-June 1997. His most recent article, "US-Mexican Border Security: Civil-Military Cooperation," appeared in the July-August 1999 issue of Military Review

Grozny 2000: Urban Combat Lessons Learned

Lieutenant Colonel Timothy L. Thomas, US Army, Retired

ODAY, GROZNY IS NO MORE. The contrast between the damaged Grozny before the latest battle and the utter destruction afterwards could not be more pronounced. The literal leveling of the city points to lessons that the Russian Armed Forces learned from their earlier battles for Grozny.

The January 2000 battle was the second major battle for Grozny in five years along with two minor battles in 1996. In fall 1994 Grozny was the scene of fighting between opposing Chechen forces, those of President Djokhar Dudayev versus the Dudayev opposition, which received covert support from President Boris Yeltsin's government in Moscow. In late November, the opposition attacked Grozny with a few tanks and armored vehicles and was quickly annihilated. A month later, the first major battle for Grozny took place. It involved Russia's armed forces and turned the city into a bloody battleground before the Russians drove Dudayev's forces from the city. In August 1996 the Chechens retook the city.

In late 1999 and early 2000, after a very well-planned advance to the Terek River, Russian forces again assaulted Grozny—this time with artillery fire and air power instead of tanks and infantry—turning the city into rubble. This battle for Grozny proved different from the infamous January 1995 battle in both the attackers' strategy and tactics.

This article examines what lessons the Russian army learned from the 1995 battle for Grozny and applied to the January 2000 battle. It also examines what lessons the Russian army either failed to learn or chose not to apply.²

BackgroundandObservations

Russian use of force in the North Caucasus finally came as a response to a raid by Chechen-led forces into Dagestan in August 1999. Sergei Stepashin, who had replaced Evgeniy Primakov as prime minister in May, sought international legitimacy by la-

The apartment bombings in Russia had a telling effect on Russian public opinion, underscoring the Russian perception that Chechnya was a bandit state without law and order and where terror and kidnappings were common, thereby directly threatening the Russian population. Putin and Russian military commanders stressed that Russian society would not be safe until the Chechen threat was completely eliminated.

beling this an antiterrorist action. As the fighting escalated and a series of bomb blasts ripped through apartment houses across Russia, President Yeltsin appointed a new prime minister, Vladimir Putin, the former head of the Federal Security Service and then the Security Council. Putin ordered Russian forces to begin a deliberate advance into Chechnya across its northern plain to the Terek River and tasked the forces with neutralizing Chechen terrorists and bandits.

The bombings in Russia had a telling effect on Russian public opinion, underscoring the Russian perception that Chechnya was a bandit state without law and order and where terror and kidnappings were common, thereby directly threatening the Russian population. Putin and Russian military commanders stressed that Russian society would not be safe until the Chechen threat was completely eliminated. To their credit, this time the Russians did not attempt an initial coup de main against Grozny but instead maneuvered toward the Terek (see map on page 63). The intervention force initially numbered 80,000 ground troops of the Ministry of Defense and 30,000 men from the Ministry of Internal Affairs (MVD). Russian analyst Dmitrii Trenin, a retired officer now working at the Carnegie Institute in Moscow, noted the following improvements:

- Commanders of the Combined Federal Troops considered many mistakes from the first Chechen War of 1994 to 1996 and drew to some extent on NATO experience in Kosovo as well. From the very outset of the war, when attacks were made they were massive and as precise as possible. The size of the federal force exceeded by two to three times the average number of troops used in the first war with Chechnya.³
- President Yeltsin promised the military that he would abandon the former tactic of frequent moratoriums and cease-fires that led to irritation and the suspicion of treason at the highest levels of the government among the troops in the previous Chechen War. The federal military command made independent decisions concerning the momentum of the offensive and deadlines of specific missions.
- Russian authorities limited the distribution of information about the progress of the war. Major television channels in Russia strangely consented.

In preparation for the general advance on Grozny, reconnaissance units moved up to the city outskirts in mid-November. By the beginning of December Russian forces had surrounded the city. The Russian command ensured that the advancing force would not be surprised on their entry into the city and deployed special small units for urban reconnaissance. Four Russian sniper companies, two from the Army and two from the MVD, quietly took up positions in the city with 50 to 60 snipers in each unit. The sniper teams, supported by the army and MVD special forces units, found targets and, equally important, provided intelligence on the whereabouts and movements of Chechen forces in the city. The snipers served as spotters and called down artillery fire on suspected rebel positions.

Russian forces employed maneuver-by-fire to destroy Chechen positions, including air strikes, artillery fire and fuel-air strikes. The Russians cite this as a lesson they learned from US fighting against Belgrade, to fight from afar or while in "remote contact." There was, however, very little concern for collateral damage, despite Russian claims that attacks were more "precise" than previous battles. Grozny was a free-fire zone. But the Russians had warned city residents in early December to leave the city, hoping to minimize civilian casualties.

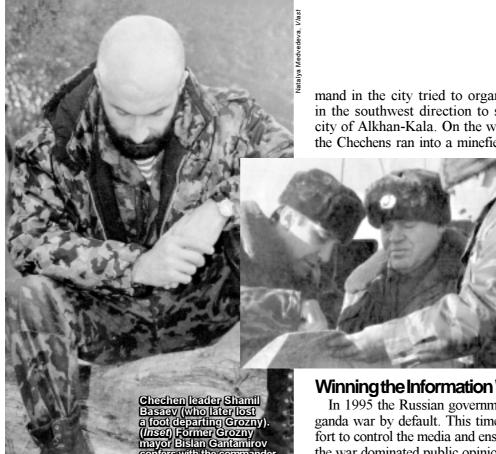
Grozny had 20,000 to 30,000 residents still huddled in basements when the battle for the city began. These residents were too old, too afraid or too isolated to exit the city. Reportedly, about 4,000 Chechen fighters remained in the city. Russian psychological operations depicted the defenders as Muslim fanatics and agents of an international, fun-



In the January 1995 battle for Grozny key terrain symbolizing victory was the Presidential Palace in which President Dudayev lived. In January 2000 Minutka Square, where many roads and underground communication lines met, was designated as the key piece of terrain that both sides fought to control.

damentalist terror network. Russians alleged that Osama Bin Laden had sent a force of 650 men to support "bandits" in the city. In the January 1995 battle for Grozny key terrain symbolizing victory was the Presidential Palace in which President Dudayev lived. In January 2000 Minutka Square, where many roads and underground communication lines met, was designated as the key piece of terrain that both sides fought to control.

With the exception of one probe by the ground forces that turned out to be a disaster, the Russians did not initially penetrate the city center as they did in the 1995 battle. The term "assault force" was seldom used until late January. One infantry soldier stated that he would not enter the city until all of the buildings were destroyed. Special MVD units, the Special Purpose Police Detachment (OMON) and the Special Rapid Reaction Detachment (SOBR) and regular MVD forces were initially used for this task. The ground forces later reinforced or replaced them. While Russian forces encircled and slowly moved into Grozny, Russian air power continued to hammer selected targets—suspected terrorist hideouts, cellular relay towers and communication facilities—across the republic. They sought to isolate the defenders in Grozny from any external support and supply.



Journalists called Russian operations in Grozny "salami tactics," accusing the Russians of dividing the city into sectors, the sectors into sub-sectors and then slicing these piece by piece. During the first battle for Grozny, dividing the city into sectors (using the railroad lines and the Sunzha River as dividers) was also part of the Russian plan.

confers with the commander of the Combined Grouping

of Federal Forces, General Victor Kazantsev.

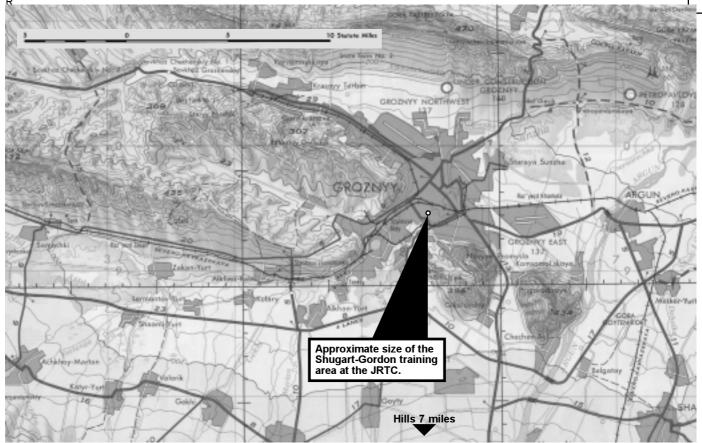
On 13 December 1999 Russian forces took the eastern suburb of Grozny (Khankala), and attempted a breakthrough on 16 December. The breakthrough failed and Russian ground forces, who spearheaded the move, allowed MVD forces to move in and do most of the fighting until mid-January. Heavy fighting for the city outskirts began on 23 December. In the meantime the Russian command regrouped forces for another attempt to take the city by largerscale probing actions. A decisive yet cautious and deliberate assault began on 17 January and lasted three weeks. During the fighting, possession of several suburbs and key buildings adjoining the city center changed hands several times. On 1 February Chechen leaders ordered a general withdrawal from Grozny. Their forces suffered heavy casualties and faced isolation and annihilation. The Chechen command in the city tried to organize a withdrawal in the southwest direction to seek refuge in the city of Alkhan-Kala. On the way out of the city, the Chechens ran into a minefield, suffered heavy

> casualties and lost several kev leaders. Shamil Basaev, one of the most infamous Chechen leaders, was very seriously wounded.⁴ This route, which had opened just the day before, proved treach-

Winning the Information War

In 1995 the Russian government lost the propaganda war by default. This time it made every effort to control the media and ensure that its view of the war dominated public opinion. Russia won this information war from day one of the fighting and is still winning. The government and military control access to combatants and censor reporting that could undermine support for the war. Reports of Russian military successes have fueled support for military activities among the populace. However, some military spokesmen have altered the facts and limited independent reporting so much that it is difficult to separate fact from fiction.

With few exceptions, Russian journalists have not complained about the media management, and instead have picked up much of the military's jargon, such as references to "working" in the city instead of bombing or assaulting. Media control was formalized in December 1999 through the mechanism of Resolution Number 1538. The President of the Russian Federation created the Russian Information Center whose job it was to filter information before providing it to the mass media and to control the dissemination of foreign information.⁵ Such tight media control was absent in the first fight for Grozny, and it cost the Russians dearly. One analyst noted that "after the first Chechen war, the Russian military came to the conclusion that they had to first play out the information war against the Chechen resistance, as in their opinion the Chechens had succeeded in morally disarming public opinion in Russia. Therefore, the Russian strategy of reprogramming the mass consciousness became their main mission in their struggle against Chechen



Russia's armed forces appeared to have learned and implemented many lessons from the January 1995 battle for Grozny. Artillery, tanks and even ground forces acquired a supporting role initially, with the latter designated as the intervention force only after the enemy had been adequately suppressed. This caution undoubtedly saved the lives of many Russian soldiers, a greater concern this time around than in 1995.

separatism—fixing societal apathy towards the task of retaining Chechnya as a part of Russia and guaranteeing support for radical actions." Efforts to analyze Russian and Chechen activities during this most recent battle for Grozny must account for the Russian information campaign. Interviews with or about top Russian and Chechen military leaders continued, however, and they provided information used to shape public opinion.

Interviews with Russian Commanders

Several noteworthy interviews with Russian commanders demonstrated a desire to apply lessons learned from the January 1995 battle for Grozny and covered a wide range of topics. First, the Russian commanders made every effort to ensure secure communications among their forces. Colonel General Yuriy Zalogin, Chief of the Signal Troops of the Russian Armed Forces, gave a speech to journalists in mid-October. He cited the lack of encryption devices for secure communications during the 1994-1996 Chechen conflict as a serious shortcoming for the federal forces. Zalogin noted that the latest *Akveduk* communication equipment would be delivered in November-December of 1999 to almost

every soldier. Now everyone from the troika sniper teams (they were called "troikas" because they contained a sniper, grenade launcher and machine gunner) to the front commander would have the capability to send and receive scrambled communications, making it impossible for unauthorized persons to intercept or decipher transmissions.

The Chechens, according to Zalogin, continue to maintain several centers to intercept discussions and even have devices that can change or imitate the voices of Russian military commanders. However, as in the last war, the Chechens continue to use foreign communication devices, particularly the Iridium satellite system handsets produced by Motorola. This is the same company from which the Chechens purchased the radios used in the first fight for Grozny (and probably used in the 1999-2000 battle). Zalogin noted that the rebels are still using cellular communications—most probably using relay stations in Dagestan and Ingushetiya since those on Chechen territory have been destroyed.

Second, maneuver-by-fire played a key role in the Russian advance to the Terek and in the siege of Grozny. This technique was not used sufficiently during the January 1995 battle. In November 1999,

Colonel General Mikhail Karatuyev, Chief of the Missile and Artillery Troops of the Federal Forces, stated that the successes of the Russian forces were predetermined by the adjustments for establishing

The Chechens, according to Zalogin, continue to maintain several centers to intercept discussions and even have devices that can change or imitate the voices of Russian military commanders. However, as in the last war, the Chechens continue to use foreign communication devices, particularly the Iridium satellite system handsets produced by Motorola.

and using artillery groups. This included the introduction of four special features:

- Each motorized rifle company and each airborne company was supported by an artillery or mortar battery under its direct command.
- For the first time in practice, Russia used a decentralized zonal-target fire strike method instead of their standard and centralized method of artillery fire.
- Fire strikes were conducted against remote approaches from a secure distance, keeping the enemy away from Russian troops.
- Topogeodesic, meteorological and other types of support were more organized and deliberate.⁸

According to Karatuyev, for zonal-target strikes at battalion and above, units stipulated their own zone of responsibility for reconnaissance and fire strikes. The corresponding commander was in charge of conducting fires in that zone. This decentralized fire control allowed lower echelons initiative for more active, responsive and effective artillery use. Historically, to conduct a fire strike against an enemy, information from all of types of reconnaissance flowed into the highest headquarters, which then assigned targets for all firing weapons, including mortars. Only then did information flow down the chain of command.9 This inefficient use of time-sensitive reconnaissance data often allowed the target to move before the fire mission could be conducted. Journalists called Russian operations in Grozny "salami tactics," accusing the Russians of dividing the city into sectors, the sectors into sub-sectors and then slicing these piece by piece. During the first battle for Grozny, dividing the city into sectors (using the railroad lines and the Sunzha River as dividers) was also part of the Russian plan.

Third, taking a page from NATO's recent conflict in Kosovo, Lieutenant General Gennadiy N. Troshev, first deputy commander of the Combined

Troop (forces) Grouping, stated in early February, after Grozny was all but taken, that the plan had been not to enter the city but only to blockade it. Bandits were to be destroyed from afar using aircraft and artillery. This slowed the troops' advance (tanks were not sent in as they were last time; however, they were used for direct-fire support to advancing storm teams). The federal forces maintained their external ring around the city and prevented the guerillas' organized withdrawal. Troshev noted that the force was much better prepared eventually to enter the city this time, since planners "painstakingly studied not only the streets and the routes of approach to some regions of the city, but also to all its public utilities. We raised all of the archives, found maps . . . based on them we determined where the sewage lines are and how and where the heating lines go . . . there are labyrinths as tall as a man and 2 to 3 meters wide. Therefore, before we began to storm the city, combat engineers and reconnaissance personnel went out to these public utilities. 10

Troshev also touched upon the issue of stress, noting that soldiers received time for rest and rehabilitation. Engagements in a city are the most complex type of combat, and the army lived up to the motto of "save the people." Only 100 men died from the federal forces during the entire Grozny operation, Troshev added.¹¹ Reportedly, a few hundred rebels in small groups are still hiding in underground communication tunnels and basements.¹² Combat deaths during November and December, however, reached nearly 1,000.

Finally, the most interesting interview with a Russian military leader was with a Chechen! The federal forces had acquired the services of former Grozny Mayor Bislan Gantamirov. The head of a Chechen police force, Gantamirov stated that he wanted to rehabilitate the Chechen people in the eyes of the Russian and world communities. If successful, he would offer the Chechen people something they had wanted for the past three years—a law enforcement system that would create order for the entire population. He formed several battalions of fighters from internal agencies, to include a special rapid-reaction detachment and a patrol-post service company. Gantamirov was imprisoned by the Russians until October 1999. He stated that he was wrongly imprisoned and that the current leaders of the Russian forces (General Staff Chief Anatoliy Kvashnin, North Caucasus group commander Colonel General Viktor Kazantsev and Troshev) not only supported him but also helped arrange his release.¹³

Gantamirov called for a new government made up of young, devoted people. "This government must not be a puppet of Russian bayonets," he added. "Rather, the federal army must become a rearguard and vanguard for the Chechen government." When asked if there would be difficulty controlling all the clans and tribes in Grozny, Gantamirov added that the issue of *tieps* and family relations would not be raised. The only people who would be put in jail would be those with blood on their hands.¹⁴

Chechen Tactics

The Chechens made it difficult for the Russians to acquire any territory in Grozny. Again, the Russian force, while better prepared than in January 1995, was still weak in urban tactics. Privately, one Russian officer told a reporter that "a Chechen company can match head for head a Russian brigade" in Grozny.¹⁵ The Chechens boarded up all first-story windows and doors, making it impossible to simply walk into a building. While trying to climb ladders or knock in doorways, Russian soldiers became targets for Chechen snipers positioned on upper floors. Reportedly the Chechens were divided into 25-man groups that were subdivided into three smaller groups of eight each that tried to stay close to the Russian force (again, "hugging" the Russian force as during the 1995 battle to minimize the Russian artillery effort).

The Chechen force had two months to prepare the city and they constructed a number of ambush points. The rebels had two defense lines, with the least-skilled personnel in the front. Snipers occupied roofs and upper floors of buildings, controlling distant approaches to specific intersections. They attempted to draw the Russians out into the street, according to the Chief of Grozny's defense force, General Aslanbek Ismailov. Snipers also could be found in trenches and under concrete slabs that covered basements. These slabs could be raised with car jacks when Russian forces approached, provide ambush firing positions, and then drop back down. The attacking Russian force struggled to discern what was merely rubble and what was a kill zone.

The Chechens spent an inordinate amount of time digging trenches and antitank ditches for the city's defense. Journalists reported that many men and women were taken from basements to dig the trenches. The Chechens used the trenches to move between houses and as sniper positions.¹⁷ As the Russian force focused on the tops of buildings or on windows, they were often attacked from the trenches, a sort of attack by misdirection.¹⁸ The



The Chechens boarded up all firststory windows and doors, making it impossible to simply walk into a building. While trying to climb ladders or knock in doorways, Russian soldiers became targets for snipers positioned on upper floors. Reportedly the Chechens were divided into 25-man groups that were subdivided into three smaller groups of eight each that tried to stay close to the Russian force to minimize the Russian artillery effort.

Chechens stated that in the city they did not use body armor because it slowed them down, or tracers, which revealed their positions too precisely.

At times, when the fight was dragging on, the Chechen force would move out of the city and attack the Russian force in the rear, especially in cities already taken. This was a daring exploit if one report is accurate—that 50,000 Russian soldiers surrounded the city. 19 Five days after that report President Putin's coordinator for information and analysis in the region. Sergev Yastrzhembskiv, noted that the Combined Grouping of Forces amounted to 57,000 members of the Ministry of Defense and 36,000 from the MVD in January 2000. Thus, the 50,000 figure is possible if both forces are taken into account. Further, Yastrzhembskiv added that there is no censorship or filtering of mass media representatives. Rather, he noted, "the ratio of Russian to foreign journalists is being held at one to three in favor of the domestic media."20 This statement clearly was at odds with the impression of Russian iournalists.

Finally, the impressive mobility of the Chechen force included escape routes from firing positions, interconnected firing positions and again the sewer network to move about the city. Reportedly

a computer in Grozny kept track of everyone in the city and other areas of Chechnya who reported in by radio. Russian forces especially feared the night-time, when the Chechens would move against and reclaim abandoned positions. The Chechen force

The Chechens stated that in the city they did not use body armor because it slowed them down, or tracers, which revealed their positions too precisely. At times, when the fight was dragging on, the Chechen force would move out of the city and attack the Russian force in the rear, especially in cities already taken. This was a daring exploit if one report is accurate—that 50,000 Russian soldiers surrounded the city.

allegedly used chlorine and ammonia bombs, set oil wells on fire to obscure fields of vision and rigged entire building complexes with explosives. Other reports indicated that the Russians offered the Chechens safe passage out of the city and amnesty for those who could prove they were not involved in the fight.

MVD-ArmyProblemsand PsychologicalOperationLessons

Federal forces still do not appear to possess a reliable system for identifying friend or foe. This shortcoming continued to cause problems between the armed forces and the MVD, a situation made worse since the Army and MVD forces even encode coordinates differently off the same map. Thus, one force may be unable to understand the other. Some maps are merely photocopies of other maps, and even regulations governing the use of signal rockets differed between services. These communication inconsistencies understandably caused problems between units such as the army and the MVD.²¹ While some Russian sources could not understand others, the enemy often could hear both using the same radio sets (available on the open market) used by the Special Purpose Police and Special Rapid Reaction Detachments—on the easily found "frequency of the day."

There were other problems between the MVD and armed forces. In Dagestan, Army operations were initially conducted under the leadership of the MVD, but then quite suddenly Internal Force commander Colonel General Vyacheslav Ovchinnikov was removed as overall commander of the fighting (but not from his post as Internal Force commander). A Ministry of Defense official took over when air-

craft and armor, which the MVD does not possess, were needed to complete the operation (another story is that Ovchinnikov and his forces did not coordinate with the armed forces as well as some would like).²²

Then in late January, Ovchinnikov was removed a second time, this time from his command during the hottest combat activity for the battle for Grozny, and replaced by Colonel General Vyacheslav Tikomirov, an army officer who had previously commanded the Ural Military District.²³ Some blame the failure of the initial attack on 25 and 26 December for Ovchinnikov's dismissal, while others cite the death of an army General (who was in Grozny on the front lines trying to motivate Internal Force soldiers to advance in mid-January). Still others attest that General Staff Chief Kvashnin simply wanted to put his own men in charge and that MVD Minister Vladimir Rushalvo, who had little or no combat experience, was easily persuaded by Kvashnin to undertake the dismissal.

Friction between the MVD and the armed forces has continued. Some Internal Force soldiers believe that the Ministry of Defense throws the MVD mercilessly into attacks, sometimes without artillery preparation. Therefore, relations are not calm between these two groups. Perhaps that is why military officers were assigned key MVD positions (to include MVD coordinator of all activities in the North Caucasus) to either help with this situation or to replace those who appear unable to perform satisfactorily. From the MVD's point of view, Tikomirov may not try to protect the Internal Troops from being used as cannon fodder, as Ovchinnikov has reportedly tried to do.²⁴ Unfortunately, the MVD is in no position to make counter claims.

The psychological factor also remained an important aspect of city combat. Using leaflets, Russian psychological operations tried to convince the civilian population in Grozny to leave. The Russians used loudspeakers to regularly appeal for surrender and attempted to establish an assembly area for Chechen fighters who wanted to surrender.²⁵ The Russians and Chechens ran several reflexive control operations (a type of psychological activity that resembles perception management) against each other. One infamous reflexive control technique was the Chechen attempt to exit the city. Chechen President Aslan Maskhadov had publicly declared that the rebels were to remain in the city until 23 February. In reality, he apparently authorized the rebels to abandon their defensive positions as early as 1 February. Maskhadov attempted to control the Russian force by making it appear that his forces would re-

main in place for at least three more weeks.

Another reflexive control operation was the Russian attempt to convince Chechen defenders that they might safely withdraw southwesterly from the city under the cover of darkness. The Russians achieved their goal using fake radio nets purposely left open to the Chechen force and over which they communicated this vulnerability openly. In reality, the Russians were waiting for and crippled the withdrawing Chechens with mines and blocking forces.²⁶

Russia's armed forces appeared to have learned and implemented many lessons from the January 1995 battle for Grozny. They made the information war a priority and controlled the media. Artillery, tanks and even ground forces acquired a supporting role initially, with the latter designated as the intervention force only after the enemy had been adequately suppressed. This caution undoubtedly saved the lives of many Russian soldiers, a greater concern this time around than in 1995.

Armor was not used in an attack into the city as it was in January 1995. Instead of conducting a frontal assault against well-developed enemy defensive positions, the federal forces chose to send in reconnaissance units and call artillery fire on suspected enemy positions. This type of "indirect approach" was based on fighting from remote locations. Unmanned aerial vehicles (UAVs) may perform more Russian reconnaissance missions if such a fight develops in the future, although UAVs were probably used in the battle for Grozny and simply have not been reported. This use is implied since UAVs were used in theater during the 1995 war in Chechnya.

Communications problems were overcome to some degree, to include the ability to send encrypted messages and the increased compatibility of batteries with various kinds of radios. Disabling cellular phone relay stations was an early priority since these phones work much better in cities than frequency modulated communications.

In a surprising and threatening move, the federal forces relied heavily on fuel-air explosives and tactical missiles (SCUD and SCARAB). These systems suppressed the Chechens both physically and psychologically and these assets were used to attack fighters hiding in basements. Such fire strikes were designed for maximum psychological pressure—to demonstrate the hopelessness of further resistance against a foe that could strike with impunity and that was invulnerable to countermeasures. The TOS-1, heavy flame system, (a multiple rocket launcher mounted on a T-72 tank chassis) played a particularly prominent role as a terror weapon.

In addition, since the city was nearly depleted of



In a surprising and threatening move, the federal forces relied heavily on fuelair explosives and tactical missiles (SCUD and SCARAB). These systems suppressed the Chechens both physically and psychologically and these assets were used to attack fighters hiding in basements. Such fire strikes were designed for maximum psychological pressure—to demonstrate the hopelessness of further resistance.

people this time around, radar was much more effective for the Russian army. And, unlike the first battle, this time Chechens were used to fight Chechens (Gantamirov's force), a practice which overcame many problems associated with tactics and language in the city. Chechen combatants friendly to the federal cause and led by Gantamirov could talk with the local population and get intelligence on the rebel positions and dispositions. Chechen human intelligence often proved more valuable than Russian signal intelligence.

Two problems that did not get resolved appear to be coordination between Russian military and MVD forces, which remained contentious; and the inability of Russian forces to overcome Chechen hugging tactics, making it almost impossible to walk a wall of steel in front of advancing troops. Both problems were present in the first battle. And it was only in late November that it was noted that high-quality night sights must replace the inadequate current night systems for sniper rifles and ground attack aircraft.

If Russian forces received a *dvoika*, or an "F" in the Russian grading system, for their assault and a *troika* or "C" for their capture of Grozny in 1995, they would receive a *Chetvorka*- or "B-" for their

combat performance during the January 2000 battle. They did better than in January 1995 and were prevented from obtaining a better evaluation (B or B+) simply because to obtain combat success they had to pound the city into rubble. Turning a major city inside Russia into ruins raises serious questions about the nature of the military-political lessons learned from the first battle.²⁷

In 1994 and 1995 the Russians also took Grozny, only to lose it 18 months later. Even now unresolved issues linger for Russia. First, military success is a necessary precondition for imposing a political settlement, but the Russian government has not tried to turn its recent victory into a political settlement. Second, a long-term commitment to operational momentum comes at the expense of quick victory in cities. Finally, the recent battle of Grozny teaches that while advanced weapons and sound military art

Friction between the MVD and the armed forces has continued. Some Internal Force soldiers believe that the Ministry of Defense throws the MVD mercilessly into attacks, sometimes without artillery preparation. Therefore, relations are not calm between these two groups. Perhaps that is why military officers were assigned key MVD positions to either help with this situation or to replace those who appear unable to perform satisfactorily.

contribute to final military victory, they are not self sufficient. Combat success in cities ultimately depends on soldiers' fighting will and ability to overcome the stress, chaos and deadly conditions of urban operations. MR

- 1. For a comparison of the two battles for Grozny and a deeper portrayal of the context and topographical conditions of the fight, visit the FMSO web page at http://call.army.mil/call/fmaso/fmso.htm. 2. For the author's views on Russian lessons learned from the first battle of Grozny, see *Parameters* (Spring 1999), 87-102.
 3. Dmitrii Trenin, "Chechnya: Effects of the War and Prospects for Peace," Carnegie Moscow Center's briefing #1, 2000, located at http://pubs.camegieru/briefings/br_title.asp.
 4. Maksim Stepenin, "End of the Operation," *Kommersant*, 8 February 2000, 3, as translated by FBIS and downloaded from the Foreign Broadcast Information Service (FBIS) website on 8 February 2000.
 5. Emil Pain, "The Information Component in the Second Chechen War," paper presented at the US/Russian Information Warfare Seminar, Fort Leavenworth, Information Warfare Seminar, Fort Leavenworth.

- 5. Emil Pain, "The Information Component in the Second Chechen War," paper presented at the US/Russian Information Warfare Seminar, Fort Leavenworth, Kansas, 24 January 2000, 2.
 6. Ibid., 6.
 7. Vladimir Mukin, "The Communications Equipment is Becoming Obsolescent," interview with Chief of Signal Troops Colonel General Yuriy Zalogin, Nezavisimoye Voyennoye Obozreniye, 22 October 1999, 3.
 8. Sergey Sokuit, "The 'God of War' is Changing Tactics," interview with Colonel General Mikhail Karatuyev, Nezavisimoye Voyennoye Obozreniye, 19 November 1999, 1-2, as translated by FBIS and downloaded from their web page on 6 December 1999. 1999, 1-2, as cember 1999
- cember 1999.

 9. Ibid., The impressive artillery grouping deployed in the North Caucasus contained components of the Ground Troops, Airborne Troops and the Internal Troops of the Ministry of Internal Affairs. Still, problems remained. The force faced a shortage of modern sensors and reconnaissance means. Military observers noted the need for better pilotless airborne vehicles (drones or UAVs used in reconnaissance), sound ranging complexes (especially of the AZK-7 type) and high-accuracy weapons. A portable system of automated control was under development for mortar subunits, especially those using the Santimeter projectile. Already fielded are the Krasnopol high-accuracy projectile, and the Smelchak mortar shell, according to Karathuev.
- are the Krashopon Ingri-accuracy projectile, and the Strietchak montal shell, according to Karatuyev.

 10. Oleg Falichev, "There is Not and Will Not be any Mercy for the Bandits," Lieutenant General Gennadiy N. Troshev answers Krasnaya Zvezda's Questions," Krasnaya Zvezda, 1 February, 2000, 1.

 11. Ibid.

 12. Alan Kachmazov, "Hornet's Nest in Argun Gorge," izvestiy, 9 February 2000, 2, as translated by FBIS and downloaded from the FBIS website on 9 February 2000.
- 13. Said Bitsoyev, "Federal Army Must Become Rear of Chechen Militia," interview with Chechen opposition leader Bislan Gantamirov, *Novyye Izvestiy*, 13 January 2000, 1 and 5, as translated by FBIS and downloaded from the FBIS website on 19 January 2000.

- 16. Moscow Interfax, 30 January 2000, 0854 GMT, as translated and downloaded by and from the FBIS website.

 17. Moscow Interfax, 27 January 2000, as translated by FBIS and downloaded from the FBIS website on 27 January 2000.

 18. Moscow NTV, 0700 GMT, 23 January 2000, as translated by FBIS and downloaded on the FBIS website on 23 January 2000.
 - Ibid., Kalinina.
 Mikhail Falaleyev, "We Are Protecting World Civilization," Krasnaya Zvezda.
- 20. winshall Falaleyey, we are Protecting world Chillization, Krasnaya Zvezda, 29 January 2000, as translated by FBIS and downloaded from the FBIS website on 31 January 2000.

 21. See, for example, Alan Kachmazov, "Territory Under Control," *Izvestiya*, 18 January 2000, 1 and 2.

- 22. Aleksandr Igorev and Ilya Bulavinov, "General's Line," Kommersant, 25 January 2000, 1 and 3, as translated by FBIS and downloaded from the FBIS website on 25 January 2000.

 23. Ilya Kedrov, "Defense Ministry Takes Over Internal Troops. Fighting for Grozny Will Continue Another Two Weeks," Nezavisimaya Gazeta, 25 January 2000.

 2, as translated by FBIS and downloaded from the FBIS website on 26 January 2000.

- 2000, 2, as translated by FBIS and downloaded from the FBIS website on 26 January 2000.

 24. Yuliya Kalinina, "Hawk' Becomes a Sacrificial Lamb," Moskovskiy Komsomolets, 24 January 2000, 1 and 2, as translated by FBIS and download from the FBIS website on 25 January 2000.

 25. Moscow NTV, 0700 GMT, 23 January 2000, as translated by FBIS and downloaded from the FBIS web site on 23 January 2000.

 26. Moscow Russian Television Network, 1600 GMT, 24 January 2000 as translated by FBIS and downloaded from the FBIS website on 24 January 2000. The dicial interest, Russian soldiers had painkillers in their pockets and rubber tourniquets wrapped around their rifle barrels. When advancing in early February, after the expulsion of most of the rebel force, the Russian military led with bomb disposal teams since the Chechens left behind many mines in buildings and on roads.

 27. How would US forces do under similar circumstances? During a recent speech the US Army Chief of Staff reiterated his interest in four points regarding US war fighting concepts: initiate combat on our terms, at a time, place and method of our choosing; gain the initiative and never surrender it; build operational momentum over time; and win as rapidly as possible. Would these criteria apply in the case of urban operations such as Grozny? The short answer appears to be no. In the city, the enemy initiated combat on his terms, not that of the Russians. The Chechen force was able to prevent a quick victory and often deny the attacking Russian force any initiative—this in a city almost devoid of civilians. Once the initiative was gained, it was often returned to the Chechens at the end of the day. The Russians used an indirect approach to surround the city and inflict damage from afar, outside the range of RPGs that had decimated the Russian force in the city in 1995. However, it lasted longer than the direct approach, took a tremendous toll on international opinion and did not end Chechen resistance, which continues in the mountains South of Grozny and e

Lieutenant Colonel Timothy L. Thomas, US Army, Retired, is an analyst with the US Army Foreign Military Studies Office, Fort Leavenworth, Kansas, and is an adjunct professor at the US Army's Eurasian Institute, Garmisch, Germany. He received a B.S. from the US Military Academy and an M.A. from the University of Southern California and is a graduate of the US Army Command and General Staff College and the US Army Russian Institute (USARI). He held a variety of command and staff positions in the Continental United States and Europe, including director, Soviet Studies, USARI, Garmisch; inspector of Soviet tactical operations, Conference on Security and Cooperation in Europe, Eurasian Institute, Garmisch; and S2, 2d Brigade, and commander, Company C, 313th Military Intelligence Battalion, 82d Airborne Division, Fort Bragg, North Carolina. He is the assistant editor of the journal European Security. His article "Human Network Attacks" appeared in the September-October 1999 issue of Military Review.

The Second Chechen War the Information Component

Emil Pain, Former Russian Ethnonational Relations Advisor, as translated by Robert R. Love

N DECEMBER 1994 Russian authorities made their first attempt to crush Chechen separatism militarily. However, after two years of bloody combat the Russian army was forced to withdraw from the Chechen Republic. The obstinacy of the Russian authorities who had decided on a policy of victory in Chechnya resulted in the deaths of at least 30,000 Chechens and 5,000 Russian soldiers. This war, which caused an estimated \$5.5 billion in economic damage, was largely the cause of Russia's national economic crisis in 1998, when the Russian government proved unable to service its huge debts.

It seemed that after the 1994-1996 war Russian society and the federal government realized the ineffectiveness of using colonial approaches to resolve ethnopolitical issues.³ They also understood, it seemed, the impossibility of forcibly imposing their will upon even a small ethnoterritorial community if a significant portion of that community is prepared to take up arms to defend its interests.

Aslan Maskhadov was recently elected president of the Chechen Republic and has been so recognized by Russian officials. In 1997, when Maskhadov visited Moscow to sign a treaty, both he and President Boris Yeltsin signed an agreement obligating both sides to resolve peacefully all contentious issues arising between the Federation and the Chechen Republic.

Just a few months before the second war, Russian Prime Minister Sergey Stepashin stated that federal troops would not be sent into Chechnya, which most experts believed. However, in August 1999 President Yeltsin removed Stepashin from his post and named Vladimir Putin as his replacement. In October combat actions began anew in Chechnya. Russian authorities called these actions "operations to suppress terrorism," while journalists christened them the "second Chechen war."

The militarization of the mass consciousness. It is striking just how quickly Russian society's at-

By using professional military jargon in their reports, journalists lend the war an everyday flavor. Thus, in Chechnya the army is "working." Aircraft are not bombing and the artillery is not firing on towns, but rather, as the journalists put it, they are "working on towns." Rather than speaking of an "assault" on Grozny—a term which has painful associations for Russians—the military terms "special operation" and "mop-up" are used.

titude toward the war in Chechnya changed, beginning with the change in the opinion of politicians. In June 1999 the Communists and most political parties in the Russian Parliament (the Duma) angrily demanded that President Yeltsin be removed from office, saying that he had "unleashed the war in Chechnya." But by that November most Duma members (with the exception of the *Yabloko* faction) supported "unleashing" a new war.⁴

In 1994 the press deplored the introduction of troops into Chechnya. The initial bombings brought such strong protest that the president was forced to declare publicly that he had ordered the bombings stopped. The bombings did not stop, but it was as though they were being carried out against the will of the commander-in-chief. Now the situation in the press has changed: gone is the former emotional anguish, gone are the passions about the loss of innocent civilian lives. Instead, official summaries and dry reports of the army's victories dominate. By using professional military jargon in their reports, iournalists lend the war an everyday flavor. Thus, in Chechnya the army is "working." Aircraft are not bombing and the artillery is not firing on towns, but rather, as the journalists put it, they are "working on towns." Rather than speaking of an "assault" on

Grozny—a term which has painful associations for Russians—the military terms "special operation" and "mop-up" are used.

The press has changed its attitude toward the obvious untruths of Russian politicians and the military in their comments on the second Chechen war.

A number of factors repelled even those Russian intellectuals who had unconditionally supported "the Chechen struggle for independence": the rise in crime; Chechnya's de facto independence; the relentless raids on neighboring territories; the kidnapping and hostage taking, which included journalists and international humanitarian workers; and the increase in slavery and slave trading.

The press quickly refuted statements by Russian generals that the Russian army had not bombed border areas of Georgia and had not fired on a Grozny market place, or that Russian soldiers had not killed a saleswoman in a little store in Ingushetia and had not participated in pillaging in the village of Alkhan-Yurt. However, in contrast to the previous war, the press did not investigate or condemn these actions.

Censorship of reports on military actions has increased sharply. The circle of journalists allowed to report from Russian troop positions about events in the second campaign has been strictly limited. It is now illegal for Russian or foreign journalists to visit camps of the Chechen armed resistance. In contrast, during the first war many Russian journalists spent months in the headquarters of former separatist leader Dzhokhar Dudayev. Even in the days of the Soviet Union, at least starting with the Gorbachev period, there was never such suppression of dissent on state television as is the case today. On the two channels with the largest viewing audience, ORT and RTV, no statements are allowed that are even slightly critical of the Russian government's actions in Chechnya.

In December 1999 a Russian government decree created the Russian Information Center (RIC).⁵ The RIC filters information from the combat theater before it reaches the mass media. It also selects for dissemination information from the foreign press that does not contradict the Russian government's view of events in Chechnya. Furthermore, foreign journalists believe that the RIC is not above falsifying information.⁶

In addition to government censorship there is also private censorship. Boris Berezovsky is Russia's largest media mogul. His support of military actions determined the position taken by the publications and television companies that he owns and controls. Most common of all is self-censorship by journalists, many of who simply do not want to hear any objections to the military actions in Chechnya, since they share the military mood of most Russians.

As figure 1 shows, there has been a reversal in the ratio of those who support maintaining Russia's territorial integrity through military means to those who oppose doing so. In 1995 a two-thirds majority opposed a military solution to the problem. Today an equal percentage of people supports it. These changes may seem especially surprising when compared with the trends in Russian public opinion prior to the second war. Research conducted by the same service (RAMPIR) indicates a year-by-year increase in the number of people who were either happy about or willing to accept Chechnya's separating from Russia. In 1998, 82 percent of those surveyed held this opinion.

Just a few months before the military actions began, the author participated in a televised debate with Minister Ramazan Abdulatipov and defended the idea of Chechnya's gradual separation from Russia, while Abdulatipov opposed it. The program's viewers were asked to assess who was right. Their response was predictable for that period: more than 75 percent favored Chechnya's splitting away from Russia. Today's complete reversal in the public consciousness occurred in just a few months. Moreover, among those surveyed there was also a 20-fold increase in the number who favored military actions that would destroy the Chechen militants.

Reasons for increased public support. What has caused this about-face in Russian public opin-

Shifts in Russian Public Opinion about the Chechen Problem

Question	October 1995	November 1999
Military actions in Chechnya are necesto prevent the collapse of Russia.	ssary	
Agree	20%	53%
Disagree	65%	21%
Best solution to the Chechen problem	:	
Conduct military actions until the Chechen fighters are completely destroyed.	3%	63%
Withdraw forces from Chechnya and fortify its borders with Russia.	52%	14%

Figure 1.

ion? In the time between the two wars the empathy that a large segment of Russian society had felt for the 1991 Chechen revolution dissipated, particularly that of the liberal intellectuals. A number of factors repelled even those Russian intellectuals who had unconditionally supported "the Chechen struggle for independence": the rise in crime; Chechnya's de facto independence; the relentless raids on neighboring territories; the kidnapping and hostage taking, which included journalists and international humanitarian workers; and the increase in slavery and slave trading.

This reassessment did not evolve without twists and extremes. In the early 1990s many Russian intellectuals ignored the criminal tinge in the Chechens' national liberation movement. Recently, however, they have been willing to identify nearly the entire current population of Chechnya with criminals.

These attitudes became widespread after an incident in August 1999. Detachments of Chechen and Dagestani fighters commanded by Shamil Basayev and Amir Khatab crossed the Chechen-Dagestan border and attempted to seize several areas of the Dagestan Republic. All Russian political forces supported the government's actions to rebuff the terrorists. If there was any criticism in the Russian press, the author is not aware of it.

The idea that only military actions could stop the Chechen terrorists became even more deeply ingrained in the public consciousness after a series of apartment building explosions that swept across Russian cities in October, claiming the lives of hundreds of innocent civilians. Chechen involvement in planning these attacks has not been proven, and there is not a single ethnic Chechen among the suspects. However, based on information coming from the Russian special services, the public is more convinced than ever about the guilt of Chechnya, its armed forces and even its official structures.

NATO's military actions in Kosovo and Serbia during the Kosovo crisis had a significant impact on Russians' attitude toward the second Chechen war. In Russian eyes, the bombings of civilian targets that took the lives of innocent civilians and even foreign diplomats justify similar actions by the Russian military. In the wake of Kosovo, statements by politicians and public officials from NATO countries that Russia has exceeded the acceptable limits in the use of force are perceived in Russia as hypocritical, a political double standard.

Raids into Dagestan by Basayev's bands, the apartment bombings in Russian cities and the mis-



NATO's military actions in Kosovo and Serbia during the Kosovo crisis had a significant impact on Russians' attitude toward the second Chechen war. In Russian eyes, the bombings of civilian targets that took the lives of innocent civilians and even foreign diplomats justify similar actions by the Russian military. . . . People began saying that the Chechen problem could be solved by force, that an "iron hand" could restore order in the entire country.

understood "Kosovo lesson" have released the pentup feelings of national humiliation and outrage: "Nobody takes us seriously—not the Chechens, not the West"; "nobody is protecting us"; "the government and the military are good for nothing." As the poet said, "We long retreated in silence." The military's first victories in Dagestan completely reversed public opinion. People began saying that the Chechen problem could be solved by force, that an "iron hand" could restore order in the entire country. Previously it was General Alexander Lebed who had personified the image of the strong leader, but now that image belongs to Vladimir Putin. The Chechen war added to the new Prime Minister's respect. As time went by, Putin began to use this newfound political capital and respect to win support for the federal government's militaristic policy in the North Caucasus.

The rise in Putin's authority and influence brought additional supporters for the second Chechen war—political pragmatists. More accurately, these pragmatists were cynics who wanted to boost their own political capital and thus began to defend the war,

"grabbing onto the tail" of Putin's military authority. Initially these were regional leaders, then political outsiders from the parties of the right. Once Putin became the acting president, former political oppo-

Russian officials recalled that Americans had supported their government's actions against former Panamanian dictator Manuel Noriega. In contrast, the Russian public had not supported the first military campaign in Chechnya. Russian officials determined that Russian authorities had failed to present the Chechen armed resistance as criminals and terrorists. . . . The apartment bombings came at a perfect time for those who needed additional arguments to win President Yeltsin's approval for the military option.

nents began a large-scale and irreversible move into Putin's camp. This process was made easier by the climate of boundless political cynicism that has recently arisen in Russia. Public betrayals of former allies and the demonstrative rejection of long-held principles—such as antimilitary principles—are becoming the norm and are welcomed by the current Russian elite as a sign of "political flexibility."

Many people, weary from decades of failed political reforms, see Putin as the fabled hero who will ultimately bring Russia prosperity and greatness. To them, the Russian army's victory in Chechnya symbolizes Russia's coming revival.

Changing military goals. A consistent and nearly imperceptible shift in the military's campaign goals has played a major role in winning public support for the second Chechen war. In the beginning (August-September 1999) the goal was to repel Chechen aggression, a goal that Russian society entirely accepted. In October Russian authorities sought a "sanitary boundary" as the primary military objective. This boundary would protect Russian regions from incursions by Chechen terrorists, and the people fully supported this goal. By November the authorities had quietly discarded the boundary idea and replaced it with the goal of "total destruction of the terrorists." Certain politicians, such as the leader of the Yabloko Party, Grigoriy Yavlinsky, began to object, pointing to the inappropriate means being used to achieve this goal. Nonetheless, the public has so far accepted the new goal nearly without objection. Finally, speaking to soldiers on 1 January 2000 in Chechnya, Putin announced that the primary goal was now to "preserve the integrity of Russia"—exactly the goal in the previous war. The Russian public has not noticed this substitution in the goals.

Russia's military actions were justified as long as the goal was to defend against terrorism by creating a sanitary boundary. In moving deep into the interior of Chechnya the Russian army is moving Russia further away from solving the Chechen problem. Taken to its logical conclusion, the sanitary-boundary strategy will require more than just stopping troops. It will mean replacing offensive forces with large units trained to defend borders, and it will also mean constructing a special border infrastructure, with costly permanent facilities, a plowed strip and mine fields.

A sanitary boundary can better protect Russian regions from terrorist forays than would a total seizure of Chechnya, which would sparsely distribute the army over a large area. In the latter circumstance, individual garrisons inevitably control the area only at certain focal points, allowing not only small mice but also large armed detachments to slip through between those points. It was no accident that Basayev and Chechen military commander Salman Raduyev carried out their raids precisely when the Russian army seemingly controlled all of Chechnya.

The sanitary boundary reduces the losses of Russian forces as compared to distributing the forces throughout the entire republic. In the previous war the more territory Russian troops controlled, the greater their losses became. The relatively small garrisons, checkpoints and even military convoys moving between populated points became tasty prey for the partisans. Of course, as the army moves deeper into Chechnya's interior, the number of refugees rises, and so inevitably does the number of civilian casualties.

Before the first Chechen war began, the federal authorities had an opportunity to move Dagestan's border with Chechnya downward to the Terek River line. This boundary would have created frontiers along the Terek River suitable for mounting a defense against terrorists and for applying pressure to Grozny.

A similar proposal was presented in September 1994 at a session of special advisors to the Russian president, and elements of this proposal made their way into the press. The proposal was entitled "One Chechnya, Two Systems." Its basic idea was to create a "welfare zone" within three northern areas of Chechnya. This zone would have allowed residents

to choose to live in the lawless Dudavev zone or in a fairly well-established pro-Russian zone. That idea would have been easier to implement then than it would be today. At the time, Russia could have expected support from the people of the northern areas, particularly the entire Upper Terek area. It had never recognized Dudayev's authority, and it had defended its lovalty to Russia. However, Russia missed this opportunity both in 1994 and 1999. Similar reasons hindered implementation of the sanitaryboundary strategy.

The primary reason is the inertia of a military machine: an expeditionary force that is large and growing stronger cannot sit idle without lowering the combat morale of the troops. An army demands that there be no stopping and no negotiating. It was difficult to stop the army in the first war when virtually the entire Russian public actively opposed the war. It is even more difficult to stop it when, judging by the polls, the vast majority of Russian citizens demand that the army "pound the low-lifes into the ground."

It may be that big-business oil interests played a quiet role in the army's moving deep inside Chechnya. Their goal would have been to protect pipelines. However, a protracted war only makes protecting the pipelines more difficult.

Other hidden economic factors also played a role in turning up the military heat. However, the chief factor that prevented the possibility of stopping the Russian military at the Terek was the Russian pre-election requirement for a "victorious war." In 1999 this requirement was even more powerful than it was in 1994. The popularity ratings of presidential candidate Putin and those of the parties he supported during the Duma campaign were closely linked with a military solution

RUSSIA Moscow missed an Dagestan opportunity to establish a Stavropol zone of control anchored at the Terek River. Kray Terek River Mozdok Chechnya Grozny Indushetia Khasavyurt Barsuki • Nazran' Railroad Vladikavkaz Kirovauya • MOUNTAINS CAUCASUS Sovetskoye • 100 Kilometers RUSSIA Dagestan 100 Miles Chechen withdrawl routes Black Attack axes **GEORGIA** Sea

In the beginning (August 1999) the goal was to repel Chechen aggression, a goal that Russian society entirely accepted. In October Russian authorities sought a "sanitary boundary" as the primary military objective. . . . Finally, speaking to soldiers on 1 Jan 2000 in Chechnya, Putin announced that the primary goal was now to "preserve the integrity of Russia"—exactly the goal in the previous war.

to the Chechen problem. If Putin had abandoned an offensive strategy in favor of simply digging in, his popularity could have fallen as rapidly as it had risen.

Gaining Public Support

After the first Chechen war, the Russian military concluded that it had lost the information war to the Chechen resistance, which had morally disarmed Russian public opinion. Hence, Russian strategists saw reprogramming public consciousness as the primary goal in their battle with the Chechen separatists. They wanted to eliminate public apathy toward the military's task of retaining Chechnya as part of

It is possible that Russian military leaders have indeed learned something from the previous war. However, they have surely not learned one most important lesson—in a guerilla war controlling a territory does not mean victory. It is not the territory that must be won, but the confidence of the people. On what forces in Chechnya can federal troops rely for support?

Russia. They also wanted to win public support for Moscow's use of force against the Chechen separatists.

A former deputy prime minister, General Anatoliy Kulikov, who ran all the power ministries in Victor Chernomyrdin's government, recently spoke openly about this subject. Russian officials recalled that the American people had supported their government's actions against former Panamanian dictator Manuel Noriega. In contrast, the Russian public had not supported the first military campaign in Chechnya. Russian officials determined that Russian authorities had failed to present the Chechen armed resistance as criminals and terrorists.8 In the subsequent years, 1996 through 1999, this mistake was successfully overcome, in large part through the actions of the Chechen criminal groups and political extremists themselves. However, the Russian special services have also supplied the mass media with materials that darkened the terrible image Russians already had of the Chechen terrorists. These efforts have not been wasted; something akin to mass hatred for Chechen terrorism has emerged in Russian society. Monthly polling by the newspaper *Literaturnaya* Gazeta showed that in every month of the second half of 1999, Basayev occupied first place among the 10 people most hated by Russian citizens.

With this psychological background it was not difficult for Russian authorities to impart a number of informational and propagandistic cliches and assure reliable public support for federal military actions in Chechnya.

The image of terrorists and aggressors. The real shift in Russian public opinion took place after Basayev led a detachment into Dagestan and after

a series of explosions (attributed to Chechen terrorists) at apartment complexes in Moscow and other Russian cities. These actions and the anti-Chechen sentiments that arose in Russian society in their wake were put to use to provide informational support for the Chechen war. At the same time, discussions of the possibility that Russian special services had been involved in organizing these crimes were carefully driven out of the information space. However, such ideas invariably arise when attempting to explain terrorist actions that seem completely illogical.

It remains a mystery how the Basayev detachment of 2,000 men thought it could take Dagestan or even any of its regions when it would have to face the entire Russian military. Perhaps Basayev was lured into Dagestan. If considered in terms of Chechen separatists goals, the apartment-house bombings make no sense. On the other hand, the bombings came at a perfect time for those who needed additional arguments to win President Yeltsin's approval for the military operation in Chechnya.

Prior to mid-September 1999 no one would have dared present Yeltsin a plan for sending troops into Chechnya. Everybody knew how difficult and painful the failure of the first military campaign had been for him. Moreover, in early September President Yeltsin was not fully convinced that his generals would succeed in Dagestan against Basayev. He publicly expressed his dissatisfaction with the military, who he said had "missed the capture of an entire region." Then in September the apartment buildings explosions in Buynaksk and Moscow pushed the president and Russian public opinion into approving the military move on Chechnya.

By no means is the author saying that Russian special services were involved in Basayev's attack on Dagestan or in the blasts at the apartment buildings in the Russian cities. Mere suspicions are insufficient for such an assertion. However, the Russian public's fixed opinion that "they attacked us," is also disputable. In any case, there is no proof whatsoever that official authorities in the Chechen Republic were involved in the aforementioned acts.

Immediately after the bombings, Chechen president Aslan Maskhadov expressed his condolences to all Russian citizens. He also distanced himself from Basayev's terrorist actions in Dagestan. Maskhadov could be faulted for not openly criticizing Basayev and for not making an effort to hand over to Russian courts the suspected terrorist. However, the leader of the Chechen republic, according

to his special envoy to Moscow, was following Russia's lead. Russia had never taken responsibility for the actions of its citizens who provided armed support to separatist forces—in Abkhazia and South Ossetia, for example. Nor did Russian authorities attempt to deliver General Lebed to Moldovan courts. In July 1992, acting on his own initiative, Lebed provided 10th Russian Army support to Transdniestrian separatist forces. He managed the 10th Army's actions against the regular armed forces of a sovereign state and member of the Commonwealth of Independent States. ¹⁰ Moreover, Lebed was eventually appointed to one of Russian's highest government posts.

The Image of the "New War." Those responsible for providing information about the second Chechen war can take credit for instilling in the mass consciousness the idea that the second campaign is different from the first—that the army is better prepared, is taking fewer losses and has greater hopes for victory. However, this image is largely an illusion based on several factors.

First, information about combat losses is unreliable because the special services lower the number of Russian losses, inflate the losses on the Chechen side and do not publish the number of civilian casualties. In the previous war 10 civilians died for every one Chechen fighter. Today's rate is unknown, but indications are that the situation has changed little or not at all. At an international conference in Moscow, Oleg Orlov, the head of a Russian human-rights society called "Memorial," described an attack on Basayev's home. In the process of destroying Basayev's home with a "precision" missile, five other buildings were also destroyed, including multistory buildings that housed innocent civilians. Basayev himself escaped unharmed.¹¹

A second factor in the illusion is that people with high hopes are inclined to accept the desirable as fact. The military actions in Dagestan, which the general public regards as completely successful, in reality provide no basis to suggest that the federal armed forces have become more effective than in the previous war. It must be remembered that the militants were capturing entire areas and that Basayev's and Khatab's circles twice managed to depart unscathed, even though they were surrounded by regular armed forces who outnumbered them many times over and had vastly superior weapons.

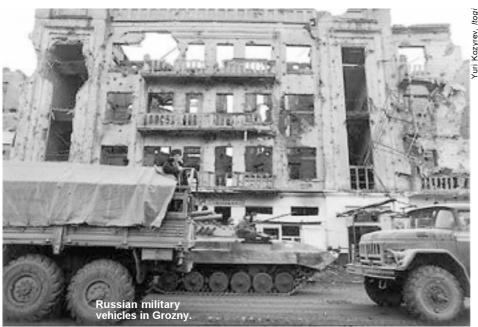
Not much time has passed since the end of the first Chechen war, but many have already forgotten that then, as now, in the war's early months re-



The sanitary boundary reduces the losses of Russian forces as compared to distributing the forces throughout the entire republic. In the previous war the more territory Russian troops controlled, the greater their losses became. The relatively small garrisons, checkpoints and even military convoys moving between populated points became tasty prey for the partisans.

ports from the front were largely positive. In the first war the troops moved out on 10 December 1994; a week later they approached Grozny; in another week they had completely blockaded it; by May 1995 federal forces controlled more than 90 percent of the republic. But representatives of the federal authorities felt relatively safe in only two very small locations—the Northern Airport and the Seat of Government building, which was guarded like a citadel. One could move between these two "islands of Russian lawfulness" only by armored personnel carrier, preferably in a convoy. Even in convoys the federal troops were not able to protect themselves completely, as the attempted assassination of General Anatoliy Romanov demonstrated.

The primary Chechen bases, such as those in Bamut, Samashki and Gudermes changed hands several times, and federal forces never completely controlled most other populated areas. Their inhabitants signed peace treaties with the army command, occasionally agreeing to chase the bandits out of their territory. Often, however, they displayed loyalty to the Russian authorities by day and became guerillas by night.



After 10 years of Chechnya's de facto independence, an entire generation has now grown up for whom the idea of subordination to Russia is unthinkable. Chechens perceive the arrival of the Russian military to fight terrorists as Muscovites would see the arrival of a Chechen army to fight the mafia —"better our own bandits than alien liberators."

The Russian defense minister says that the guerilla movement can be quelled by cutting its supply lines. He is right in theory. However, it is unlikely that anyone will succeed in removing all the local population from Chechnya who would support the Chechen movement. Second, the first war showed that the Russian soldiers and not Islamic fundamentalists were the primary source of weapons for Chechen guerillas. It is unlikely that this source has completely dried up because court proceedings for embezzlement of public funds continue as the second Chechen war goes on. We cannot restore constitutional order in Chechnya until we restore it in Russia.

It is possible that Russian military leaders have indeed learned something from the previous war. However, they have surely not learned one most important lesson—in a guerilla war controlling a territory does not mean victory. It is not the territory that must be won, but the confidence of the people. On what forces in Chechnya can federal troops rely for support?

The image of the "liberated Chechens." Russian propaganda attempts to convince Russian citi-

zens that the Chechens, weary of the low quality of life in their virtually independent republic, are waiting for the Russian army to liberate them. The real situation is different.

It is true that life in "independent Chechnya" is not improving, that inhabitants of the republic suffer at the hands of their own bandits even more than people in the neighboring Russian regions and that Maskhadov's popularity is declining. Nonetheless, on the eve of the first war the social climate in Chechnya was much worse than it is today. Just prior to the first war there were mass demonstrations in the streets of Grozny, especially after the dissolution of the local parliament and constitutional court, the appearance of dozens of so-called "mortal enemies" of Dudayev and several attempts on his life. However, when Russian troops arrived in Chechnya most of the former enemies either forgot or temporarily dropped their vendettas and united against a common enemy.

Chechnya has retained traces of a tribal democracy and respects the process of fair elections. Thus, nobody who arrives in Grozny in a Russian tank and rides to power on Russian bayonets will be able to stay in power for long. The unenviable fate of the three leaders during the military period offers proof. The stature of the imported political figures is shrinking. Initially these imported leaders were famous people, such as the scholar and former national assemblyman of the Soviet Union, Salambek Khadzhiyev, or the last Soviet leader of Chechnya, Doku Zagayev.

Today the worthiest candidate that Russian authorities could find was the young lottery owner, Malik Saydullayev, who has no political background. If Beslan Gantamirov, a deputy prime minister in the Chechen government, replaces this young businessman as the head of the "government in exile," the situation will not improve. Gantamirov was specially released from a Russian prison to take this post. The short list of alternative political figures indicates that the personnel resources on which the Kremlin might rely are almost exhausted.

Proposals to create alternatives to the Maskhadov organs—by holding elections among Chechens living outside Chechnya—do not stand up to analysis. First, there is no legal basis for such elections: the *Constitution of Russian Federation* does not call for elections based on ethnic origins or on the basis of residence permits that have been constitutionally discontinued. Second, it is unlikely that Russian Chechens would support such an idea. Most of them oppose the Russian military actions in Chechnya and recognize Maskhadov's legitimacy, even if they condemn his policies. Third and most important, any bodies of power created in Russia will have absolutely no influence in Chechnya.

After 10 years of Chechnya's de facto independence, an entire generation has now grown up for whom the idea of subordination to Russia is unthinkable. Chechens perceive the arrival of the Russian military to fight terrorists as Muscovites would see the arrival of a Chechen army to fight the mafia— "better our own bandits than alien liberators." The idea of Chechen independence never had anything to do with a desire for a more prosperous life after separating from Moscow. For Chechens, independence means protection from bombers.¹² If not every Chechen family, then at least every clan, remembers its own who died in the first war. New losses and new insults will be remembered too, as will be the case with the 200,000 people forcibly resettled at the Ingushetia border, for example. Chechens are also aware of the unprecedented increase in ethnic prejudices in contemporary Russian society. Anti-Russian sentiments among Chechens are also more widespread than was the case in the first war. Mutual alienation is on the rise. With all these factors, can one expect the republic's populace to feel lovalty toward Russian military commanders and ci-

Prior to the start of the new campaign, about 500,000 people lived in Chechnya, at least 100,000 of military age. The forced exodus of the refugees will have had little impact on the size of this latter group, since the refugees were primarily women, children and the elderly. Therefore, the Russian army in Chechnya could easily find itself facing an armed force 50,000 to 60,000 strong. In the last war at least 30,000 civilians died. However, estimates are that only 3,500 Chechen fighters died and that the Russian military lost 4,500 soldiers. Let us say that today's Russian army is better prepared and better organized than was the army that fought in 1994 and 1995. Let us further say that perhaps 10



Information about combat losses is unreliable because the special services lower the number of Russian losses, inflate the losses on the Chechen side and do not publish the number of civilian casualties. In the previous war 10 civilians died for every one Chechen fighter. Today's rate is unknown, but indications are that the situation has changed little or not at all.

militants will die for every one Russian soldier. Even so, if the goal is the total suppression of armed resistance, then about the same number of Russian soldiers will have to give their lives as was the case in the last war.

Possible Changes in Russian Attitudes

Since 1 January 2000 the Russian press has carried an increasing number of reports about a rise in guerilla activity in Chechnya. These reports are beginning to suggest that the military operation in Chechnya cannot achieve any of its goals.

The goal of preserving the integrity of the Russian Federation is largely an invention. The dominant thinking at every recent Russian conference on federalism has been that Russia is in no danger of

disintegration. In the worst case Russia might lose a small piece in the Chechen area. ¹³ Numerous studies show that prior to the war, nobody was thrilled with Chechnya. Its relations with all its neighbors, including Ingushetia, were steadily worsening. National separatism and nationalist movements in Russia in general were declining. ¹⁴

Worsening ethnonational relations in individual areas of the North Caucasus, such as Karachayevo-Cherkessiya, do not controvert the general trend of declining nationalism and had no bearing on Chechnya. Karachayevo-Cherkessiya's warring national

Chechnya has retained traces of a tribal democracy and respects the process of fair elections. Thus, nobody who arrives in Grozny in a Russian tank and rides to power on Russian bayonets will be able to stay in power for long. The unenviable fate of the three leaders during the military period offers proof.

group leaders do not favor Chechen separatism. A certain rise in religious extremism (Wahhabism) in Dagestan did not offset the decline in nationalist movements and was driven more by internal factors such as poverty and crime than by any external influence. Many researchers view Dagestani Wahhabism primarily as a form of protest that is most widespread in areas hit hard by unemployment.¹⁵

The Chechen war will trigger an increase in such Wahhabism because it will worsen the republic's economic situation. The war has already exacerbated all the following situations: Avar-Dargin differences (an Avar militia took part in an assault on the villages of Karamakh and Chabanmakh); the division in the Lezgin ethnic group because of the harsh border regimen with Azerbaijan; and the Chechen-Akin problem because Russian forces are concentrated in a new settlement area for the Akins. None of these accounts even mentions the increasing Islamic solidarity with the 11 million Chechens in Russia. A war is more destructive to the Federation than is the existence of a rebellious republic.

The other stated goal of the war is to combat terrorism. However, the experience of countries that have tried for decades to cope with terrorism shows that military operations are not an effective cure for this illness. It requires more sophisticated methods.

Usually an unlimited search period is declared for

the heads of the terrorist organizations. They are then either destroyed over time, as with the killers of the Israeli Olympic team, or they are eventually handed over to the courts, as with Kurd leader Abdullah Ojalan. Air strikes are used to combat terrorism, chiefly to destroy an enemy's infrastructure, but since infrastructure is not built every month, such strikes are sporadic. Such air strikes do not inflict great losses on the so-called "live forces." Official reports about thousands of losses inflicted by such air strikes invite skepticism. Past results of the full-scale bombing of Chechen militant bases and new information about the results of the strike on Basavey's residence reinforce such doubt.

Political rather than military operations is the chief axis in the war against terrorism. The Israelis ultimately managed to divide the moderate and radical wings of the Palestinian resistance. Turkish authorities found common ground with the Barzani family, which had headed the Kurdish nationalist movement for decades. By doing so, they largely paralyzed the movement's military activity. Russia had two years of peace, from 1996 to 1999 and many opportunities to seek support from among the influential Chechen political elite but did not take advantage of these opportunities, due largely to the renewed quest for military solutions to the Chechen problem.

Russia may face the rather painful process of overcoming a currently widespread belief that military means offer miraculous possibilities for holding Chechnya in the Russian Federation. Sooner or later there will be at least significant changes in the Russian mass consciousness.

The quick-insight scenario. Perhaps by summer 2000 more than half the population could come to see the inadvisability of a military solution to the Chechen problem. Survey results provide the basis for this assumption.

Russian Fears of a Deteriorating Situation (November 1999 survey)

What people believe would happen if a government loyal to Moscow were established in Chechnya—	Percentage of people who believe each possiblity
Chechen fighters would initiate guerilla actions	63%
Chechen fighters would increase terorist acts in Russian cities	14%

Figure 2.

Figure 2 shows that the percentage of Russians who fear a new partisan movement in Chechnya and increased Chechen terrorism in Russia is about the same as the percentage who support Russia's military actions. Hence, the number of people who doubt the wisdom of continuing the military campaign will increase in proportion to the extent that these fears become reality. The lengthening campaign is already disappointing to those who had hoped for an end to Chechen terrorism. The longer the campaign continues and the more fierce the resistance, the greater will be the losses among Russian troops. Without question, casualties will have the greatest impact in changing society's mood, particularly given that almost none of those who support the military actions wish to participate directly or send their children to participate. Military actions and expenditures to restore Chechnya will probably have a negative impact on Russia's economy, which would make people less willing to support the military actions. There is another reason for declining support: the Russian public's support for the second Chechen war is not deep-seated and is largely a consequence of pervasive myths and illusions that were created to manipulate public opinion.

The slow-and-painful scenario. Under this scenario, authorities manage to shift the responsibility for failures on the Chechen front to enemies (internal and external). They also manage to spend quite a long time consolidating public opinion against these enemies, which include the Chechen fighters. If this scenario comes about, censorship will increase, as well as repression of dissidents. In other

The percentage of Russians who fear increased Chechen terrorism in Russia is about the same as the percentage who support Russia's military actions. Hence, the number of people who doubt the wisdom of continuing the military campaign will increase in proportion to the extent that these fears become reality. . . .

The Russian public's support for the second Chechen war is not deep-seated and is largely a consequence of pervasive myths and illusions that were created to manipulate public opinion.

words, this scenario becomes possible only with a return to the dark days of totalitarianism. However, this second scenario is less likely than the first.

Such a scenario did not unfold during Putin's acting presidency, nor after his election. Furthermore, implementation of this scenario would prove extremely difficult. Significant forces in the Russian parliament and in general society support the Chechen war but deeply oppose totalitarianism. MR

NOTES

Emil Pain is a professor at Moscow State University and the director of the Center for Ethnopolitical and Regional Studies, an independent Moscow think tank. He was President Boris Yeltsin's advisor on ethnonational relations and is a recognized expert on the Russian Federation's "conflict zones," as he has called them in previous writings. This article, which describes Russian public opinion, was originally published at a January 2000 conference at Fort Leavenworth.

Robert R. Love is a translator and interpreter with the Foreign Military Studies Office, Fort Leavenworth, Kansas. He received a B.A. and an M.A. from the University of Kansas. From 1973 to 1993, he served as a translator and department chairperson at the Defense Language Institute, Monterey, California.

V. Mukomel and M. Olkot, et al., Armed International and Regional Conflicts: Human Losses and Economic Damage. Social Consequences. Identity and Conflicts in Post-Soviet States (Russian) (Moscow: Carnegie Center, 1997), 301, 305-

<sup>306.
2.</sup> Ibid., as to the 5.5 billion-dollar estimate.
3. Translator's note: because the point is not apparent in the English translation, a word about the author's use of the term "Russian" is in order. Pain avoids the term "raussian" which would refer to ethnic Russians and/or native speakers of Russian only. Instead, he consistently uses the terms "rossiyskiy" and "rossiyanin," which refer to all citizens of the Russian Federation. By consciously using these terms, the author emphasizes the cultural and linguistic diversity of the RF citizenry, a diversity that is also reflected in the RF's military. This distinction is not trivial if the RF is to achieve unity in the midst of such linguistic and ethnic diversity.

tion is not trivial if the RF is to achieve unity in the midst of such linguistic and ethnic diversity.

4. Translator's note: Yabloko ("apple") is a political party headed by Grigoriy Yavlinsky. It has supported human rights, private property, democratization and a market economy. For more information see http://www.yabloko.ru/Persons/YAVL/index-eng.html.

5. This was Russian Federation Government Decree No. 1538.

6. The Chechen journalist Petra Prokhazskova, who writes for the newspaper Lidove noviny, filed a complaint against the RIC with the Russian Fund for the Protection of Openness. She maintains that the RIC distorted her information from Chechnya of 29 October 1999 and used it on their website. Source: Oleg Panfilov,

[&]quot;The New Caucasus War," Imedzhi (December 1999)

[&]quot;The New Caucasus War," *Imedzhi* (December 1999).

7. General Kulikov made this statement in a live radio broadcast of "Echo of Moscow" on 5 January 2000.

8. See D. Azrael, E. Pain and A. Popov, eds., *How Policy is Made in the U.S.A. and Russia: Making Decisions to Use Force in Regional Conflicts in the Late 20th Century* (Russian) (Moscow: Kompleks-Progress, 1996): 287-290.

9. Translator's note: the point of luring Basayev and his detachment into Dagestan would have been to provide legal grounds for Federal forces to attack Chechen forces. The author is not saying, however, that this was done.

^{10.} Ibid. 97-98

^{10.} Ibid., 97-98.

11. See proceedings of the 18 December 1999 Moscow conference, as printed in the newspaper series: "Chechnya—Lessons Not Learned," (Russian) Moskovskiye novosti (Moscow) No. 49, 21-27.

12. Translator's note: The Chechen thinking, according to the author, is that if Chechnya were to achieve the status of an independent state fully recognized as such by the world community, then the Russian Federation would no longer be

free to attack it with impunity.

13. See D. Azrael, E. Pain, N. Zubarevich, eds., The Evolution of Relations between Moscow and Russia's Regions: from Conflicts to a Search for Accord (Russia). sian) (Moscow: Kompleks-Progress, 1997)

^{15.} Aleksey Malashenko, "The Islamic Factor in the Dagestan War," (Russian) Nezavisimyy golos Rossii 5 (September 1999), 10-12.



XX

The Tyranny of Time and Distance:

Bridging Pafic

Lieutenant Colonel Lester W. Grau, US Army, Retired, and Jacob W. Kipp

As discussion swirls about transforming the Army, people focus on strategic deployability and naturally associate that with smaller, lighter Army platforms to fit on existing Navy and Air Force craft. But what if the mobility solution involved fundamentally different transportation—something that flew like an airplane and rivaled the capacity of a modest ship, yet traveled so low and fast that it had stealth greater than either? We have the technology. Rather, the Russians do, and the US military merely needs to decide whether to exploit the capabilities of powerful, efficient transports that can fly across the ocean in ground effect.

ITH THE END of the Cold War, the threat of global war receded and debate resumed whether the United States needs to prepare for two simultaneous major theater wars. No major peer competitors should emerge over the next two decades; however, the emergence of a coalition of states hostile to the United States could emerge as a threat by the end of the decade. The most probable threats to US national interests will come from failed states, transnational actors and competitors for resources. The bulk of the US Army will be stationed in the Continental United States (CONUS) but will deploy on force projection missions throughout the globe.

Therefore, the US Army has a marked interest in overcoming the tyranny of time and distance. While serving as commander in chief, US Transportation Command, General Walter Kross pointed out, while aircraft may deploy some forces and their equipment to distant theaters, sealift will continue to be vital since "95 percent of dry cargo and 99

percent of liquid cargo will likely move by sea."1

In no other theater is strategic deployment so daunting as in the Pacific. Commander in Chief, US Pacific Command (PACOM), US Navy Admiral Dennis C. Blair noted that fostering a more secure Asia-Pacific region remains the primary goal of PACOM and that "deployed, ready and powerful Pacific Command forces" are the best foundations for the region's security and development. Pre-positioned stocks and forward-deployed forces are the first echelon of American engagement and security in the region, but only linkage to strategic forces in CO-NUS can effectively sustain national commitments and engage in compellence. While it is no silver bullet, one older technology can assist the Army in projecting global power.

In 1998, the US Army marked a century of engagement in the Pacific and Far East. During that century, the Army proved a key factor in American forward presence and power projection during peace and

war. Its presence was necessary to deter conflicts, work with allies and friendly states, support humanitarian assistance and win the nation's wars in this vast region. This year, Americans mark the Korean War's 50th anniversary. Korean War historian and veteran, T.R. Fehrenbach observed that, "Americans in 1950 rediscovered something that since Hiroshima they had forgotten: you may fly over a land forever; you may bomb it, atomize it, pulverize it and wipe it clean of life—but if you desire to defend it, protect it and keep it for civilization, you must do this on the ground the way the Roman legions did, by putting your young men into the mud."

The US Army's century of the engagement in Asia began with the Spanish-American War. US naval power destroyed Spain's Pacific Squadron, but it could not occupy and hold the Philippines. There was a long delay between Commodore George Dewey's victory at Manila Bay on 30 April 1898 and the eventual arrival of a US Army force in the Philippine Islands. This delay created a political-military sovereignty gap and allowed an insurrection to grow which opposed incorporation into the United States. The first of three contingents from Major General Wesley Merritt's Philippine Expedition left San Francisco on 25 May 1898 and arrived in Manila on 30 June 1898; the last contingent arrived on 25 July 1898.⁴ The expedition's delay allowed Filipino nationalist Emilio Aguinalda to organize a native army and begin an armed struggle for national independence which led to a full-fledged insurgency against American rule until 1902.

While the role of the United States and its Army in the Asia-Pacific region has changed over the past century, the continuing tyranny of time and distance in the Asia-Pacific area still dominates strategic plans and concepts. By World War II, sailing times had been slightly reduced, but even today moving troops, equipment and supplies requires 21 days by sea from Oakland, California, to Manila, Philippines, and 16 more to reach the western limits of the PACOM and US Army Pacific (USARPAC) area of responsibility in the Indian Ocean. A recent report by Secretary of Defense William Cohen observed, air movement times across the Pacific are measured in hours, but sailing times still reflect "the tyranny of distance—19 days from Seattle to Thailand, 18 days from Alaska to Australia and 10 days from Hawaii to Korea." 5

Pre-positioning materiel, a Cold-War era solution, arose out of shared threat perceptions and alliance arrangements that developed during that era. Those alternatives mitigate but do not overcome the tyranny of distance and depend on continued shared interests at a time of dynamic changes in the Asia-Pacific security environment. The revolution in military affairs has yet to conquer the tyranny of time and distance for US ground forces that must deploy from CONUS to the far reaches of PACOM's area of responsibility.

US engagement in the Asia-Pacific region divides into two epochs and an epilogue. That experience demonstrates how vital US Army presence has been in providing regional stability and protecting American interests. The first epoch was dominated by a rivalry between Japan and the United States. China was weak and divided. Russia was unable to defend its far-eastern territory. The epoch began with the Sino-Japanese War of 1894 and ended in 1945 with the Japanese surrender on the battle-ship USS *Missouri* in Tokyo Bay.

In the first half of the 20th century, the US Navy was the Pacific military power center of gravity. US War Plan "Orange" (War with Japan) reflected this geostrategic calculus. The Army's primary role until Pearl Harbor was to defend the Philippines, far from CONUS and very close

A recent report by Secretary of Defense William Cohen observed, air movement times across the Pacific are measured in hours, but sailing times still reflect "the tyranny of distance—19 days from Seattle to Thailand, 18 days from Alaska to Australia and 10 days from Hawaii to Korea." It is now the end of the first decade of the post-Cold War era. Changes in the Pacific security environment raise serious questions about timely and effective deployment of American land power into theater during the 21st century. . . . Until the Army acquires the capability to deploy timely, significant land power into theater, the United States will not have a truly joint force

posture to address the full

spectrum of operations.

to the Japanese Empire. The US Navy's inability to reinforce the Philippines after the disaster at Pearl Harbor condemned the American and Filipino defenders to an uneven struggle. When the American defense ended tragically on Bataan, Philippines, in early 1942, it was the worst US defeat during the entire war. During the American counteroffensive, naval and air power proved the decisive instruments in carrying the war across the Pacific.

These forces made possible Army and Marine amphibious advances across the Southwest and Central Pacific Theaters. On the verge of the invasion of the Japanese home islands, President Harry S. Truman decided to avoid inevitable large-scale casualties and employed atomic weapons to force the Japanese to surrender. Thereafter, nuclear weapons would be a primary factor in the US military presence in Asia and an ingredient in the management and resolution of Asian security issues.

In 1947 the United States granted Philippine independence after securing a naval and air basing agreement with the elected government. The United States supported a successful counterinsurgency struggle against the Hukbalahap communist guerillas.

The second half of the century, and second Pacific epoch, was dominated by the Cold War. This confrontation took on strategic dimensions in the Pacific with the triumph of communism in China, the detonation of the first Soviet atomic bomb, the Soviet-supported North Korean invasion of South Korea, and the signing of the US-Japanese peace and security treaties. The Cold War was cold in Europe but hot in Asia.

During the Korean War one of the initial, central problems was timely deployment of forces from CONUS to stabilize the defense and create a strategic reserve to regain the operational-strategic initiative. This "policy war" or "police action" was the wrong war, in the wrong place, at the wrong time. But the US Army found itself committed to full-blown war with an intractable opponent half a world away. A negotiated settlement and not military victory defined the end of the contest, and strategic planners were quite certain that future wars would be won by air power and massive nuclear retaliation. Politically, the broad outlines of US Pacific presence were forged by the end of the Korean War. There would be a military forward presence on the Korea Peninsula, in the Taiwan Straits and across Southeast Asia. The United States deployed a large military infrastructure in Asia, especially in the Philippines and Japan.

In 1964, amid deteriorating Sino-Soviet relations, the People's Republic of China tested its first nuclear weapon. At the same time, the United States assumed the burden of opposing communism in Vietnam following the French defeat there. That commitment, which began as assistance to the South Vietnamese counterinsurgency effort, became America's largest and longest war of the Cold War era.

American withdrawal from Vietnam and the defeat of the South Vietnamese regime led to a new phase of the Cold War in Asia after 1975. Korea remained stable, thanks to US military presence and the economic transformation of the South. Japan became a global economic power among a series of Southeast Asian economic miracles. In this geopolitical context, the United States' rapprochement with China leveraged the Cold War to the US advantage. Playing the "China card" became a vital part of the East-West confrontation as detente gave way to another round of confrontations. China began a market-driven economic transformation although the Chinese Communist Party maintained its political monopoly on power. In the later 1980s and early 1990s the Cold War ended in Asia with Soviet disengagement, following their domestic crisis and imperial overreach. The US Army in the Pacific played a

crucial role in the final victory in the Cold War by providing a credible military deterrence and presence in Asia, especially in Korea.

It is now the end of the first decade of the post-Cold War era. Changes in the Pacific security environment raise serious questions about timely and effective deployment of American land power into theater during the 21st century. While the United States still retains a vast forward infrastructure in Korea and Japan, new dynamics in the Pacific and Asia raise the prospect of conflict. Instability in Indonesia and the international military intervention in East Timor, the explosion of nuclear weapons by India and Pakistan, the recent fighting over Kashmir, China's disputed claims to the Spratley Islands and the growing belligerency of China toward Taiwan point towards the possibility of regional military conflict.

Open discussions of an alliance among Moscow, Beijing and New Delhi to counter what its architects call globalism and US hegemony could well be a harbinger of new Eurasia tensions. These developments make it imperative that the US Army overcome the tyranny of time and distance to maintain credible influence as a projected force in this theater. The Army still cannot deploy large forces across the Pacific much faster than it did in 1899. What could expedite movement in the vast Pacific could also expedite deployments from CONUS to Europe, the Middle East and the Indian Ocean in crisis situations. Does such a prospect exist and can US military strategy and the US Army benefit from its realization?

Spotlighting a Technological Alternative

Strategic maneuver is an inherent characteristic of the US Navy and Air Force. Naval presence has been a feature of sea power since the age of sail. As navies grew to command the sea, they have been able to apply pressure through blockades. Modern naval theory since Alfred Thayer Mahan has viewed advances in naval technology as enhancing this role. With decline of the only oceanic contestant for the US Navy's command of the sea, chiefs of naval operations have championed a new strategic naval role. This vision incorporates precision, deep-strike weapon systems and amphibious capabilities to project power "Forward from the Sea" as an instrument of littoral warfare. Air power champions since Emilio Douhet, Sir Hugh Trenchard and Billy Mitchell have championed command of the air and deep strike capabilities so that air forces could influence the conduct and course of war. From the flight of the experimental B-15 to Latin America on a humanitarian mission in the 1930s to modern, nuclear-armed, intercontinental bombers and ballistic missiles, strategic aerospace mobility has been a vital component of US national strategy. Stealth aircraft and deep, precision-strike conventional weapons have given the US Air Force the capability for "virtual global presence"—as B-2 strikes from Whiteman Air Force Base, Missouri, against targets in Yugoslavia manifested. Both the Navy and the Air Force possess the ability to deploy and sustain timely, credible combat capabilities into distant theaters. Forward infrastructure provides support and sustainment in many regions of the globe. Naval forces give the US Marine Corps the ability to fight abroad. But the Marine Corps lacks the critical land power mass to engage in strategic maneuver in distant theaters. The Army has the critical mass to conduct such maneuver but lacks the strategic mobility to overcome the tyranny of time and distance. Until the Army acquires the capability to deploy timely, significant land power into theater, the United States will not have a truly joint force posture to address the full spectrum of operations.

The current sealift requirement, which calls for 36 roll-on/roll-off ships, does not represent an effective increase in deployment speed and requires an operational arrival port. . . . The Achilles heel in crisis is the 30-day delay in the deployment of a corps to theater. Opposing forces may seek to win before the full force can reach the theater and to engage Army forces in terrain that demands manpower and negates high-tech weaponry.

A WIG craft is controlled through its vertical rudder, its elevator and its wing flaps. It is simpler to fly than an airplane, and it turns easily. . . . Unlike other high-speed craft, they can come ashore under their own power and do not need cranes or chutes. Furthermore, since they have no aprons like hovercraft, maintenance is very convenient. WIG craft do not have to make a gliding takeoff from the water or land on the water like seaplanes, which reduces the corrosive effect of sea water on the hull.

With the Cold War's end, the Army changed from a forward-deployed power to a primarily CONUS-based force-projection power. The Army is dependent on the Navy and Air Force to get it to the fight on time. Yet, there have been no sweeping concurrent changes in the transport capability of the Navy or Air Force to support this new Army mission. Therefore, despite the best efforts of the sister services, the enormous combat power of the Army is essentially a nonplayer in a far-off, fast-breaking situation. Army Chief of Staff, General Eric K. Shinseki, has recognized this problem and has moved to address it. During a time of high operational tempo, Shinseki has articulated a vision for the 21st-century Army: "Soldier on point for the nation transforming this, the most respected Army in the world, into a strategically responsive force that is dominant across the full spectrum of operations."

He addresses the Army's serious logistic problem. "Today, 90 percent of our lift requirement is composed of our logistical tail. We are going to attack that condition both through discipline and a systems approach to equipment design. We are looking for future systems which can be strategically deployed by C-17, but also able to fit a C-130-like profile for tactical intratheater lift. We will look for log support reductions by seeking common platform/common chassis/standard caliber designs by which to reduce our stockpile of repair parts. We will prioritize solutions which optimize smaller, lighter, more lethal, yet more reliable, fuel efficient, more survivable solutions. We will seek technological solutions to our current dilemmas.⁹

In line with this vision Shinseki ordered the creation of a brigade combat team that can rapidly deploy on current US Navy and Air Force vessels and aircraft. This brigade, outfitted with new equipment, should reduce logistic tonnage requirements by 50 to 70 percent and allow the brigade to deploy anywhere in the world within 96 hours. Further, the Army should be able to deploy a division within 120 hours and five divisions within 30 days. The deployment time of the multidivisional force still reflects the tyranny of time and distance that has dominated the global reach of land power in the 20th century. The current sealift requirement, which calls for 36 roll-on/roll-off ships, does not represent an effective increase in deployment speed and requires an operational arrival port.¹⁰ Further, a 1991 Rand Study notes that the US Merchant Marine is troubled by the decline of dry-cargo ships from 300 to 200 during the 1980s and a projected decline in military sealift capacity by 2010. The study recommended modernizing sealift and making it fast. For conventional hulled vessels the term "fast" meant an increase from 20 knots to 30+ knots. A Surface-Effects-Ship (SES) option under study used a catamaran hull with an air cushion and had a speed of 55 knots but this design was judged technologically risky.¹¹

This tyranny of distance drove the Chief of Army Field Forces, General Lesley McNair, to radically recast the robust but ponderous square infantry divisions of World War I into leaner, more mobile, triangular divisions that deployed globally and won victories in the European and Pacific theaters. Deployability, however, involved costs. To give his infantry divisions offensive punch, McNair pooled assets to increase combat power. To sustain global deployability, McNair reduced the weight of armored forces by using light tank destroyers and medium tanks, whose armor protection and fire power were inferior to German Panther and Tiger tanks. The trade-off between deployability and combat power was particularly felt during the bitter initial fighting in the Bocage of Normandy.

Shinseki, like McNair, faces the twin challenges of making a forceprojection Army more deployable, more maneuverable, more surviv-



able and more lethal. The challenge of the initial brigade combat team is to guarantee that it retains crucial combat power, survivability and endurance for decisive maneuver. Backing up the brigade with the rapid deployment division is the most effective way to guarantee that the brigade's combat power will dominate stability and support operations and will readily prevail in the case of hostilities. Both the brigade and division will rely heavily on airfields for their deployment.

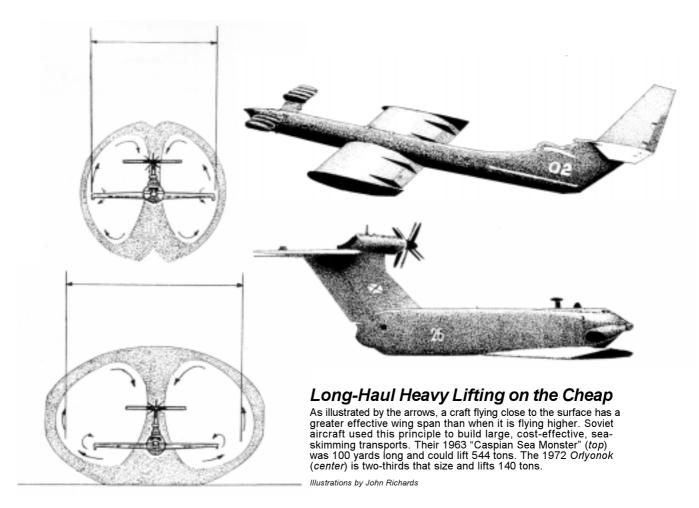
Their Achilles heel in crisis is the 30-day delay in the deployment of a corps to theater. Opposing forces may seek to win before the full force can reach the theater and to engage Army forces in terrain that demands manpower and negates high-tech weaponry. In Europe, rail movement greatly facilitated deployment of US Army ground combat power from Germany to the Balkan theater, and the success of the Implementation Force depended on the staging area in Hungary. However, in many theaters, sealift is still the only way to get large forces into theater. This was true during the Gulf War and would certainly be true of any conflict in the Pacific.

While the Army experiments with the creation of a lighter, more agile force, a comparatively old technology could solve the Army's dilemma by providing rapid, inexpensive, long-range, heavy-lift capability that does not require a seaport or an airport for departure and arrival. This technology can transport lightened versions of the Army's lethal heavy divisions and their logistics so that there is no loss of combat power. That proven technology, wing-in-ground (WIG), has been around for 65 years. The Soviet Union experimented with this technology and built a series of *ekranoplans* (screen gliders) for a wide range of missions. Russia continues to support the development of the *ekranoplan* for its own navy, other services and foreign sales.¹³

Getting There First with the Most—on the Cheap

Do you want it there fast or do you want it there cheap? This tradeoff has always been a concern of manufacturers, merchants and logisticians. When the shipment is transoceanic, sea travel is the cheapest. Air shipment is faster but costs five times more per kilogram of weight.¹⁴ However, WIG technology can deliver large amounts of cargo with significantly less fuel consumption than aircraft—50 percent more pay-

While the Army experiments with the creation of a lighter, more agile force, a comparatively old technology could solve the Army's dilemma by providing rapid, inexpensive, long-range, heavy-lift capability that does not require a seaport or an airport for departure and arrival. Wingin-ground technology can transport lightened versions of the Army's lethal heavy divisions and their logistics so that there is no loss of combat power.

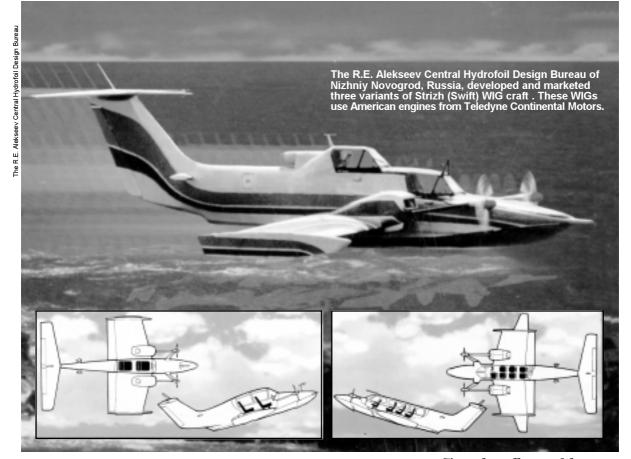


Every aircraft experiences the WIG effect as it takes off and lands. Pilots of damaged aircraft conserve energy or use the power of remaining engines more efficiently by dropping down to sea-skimming level to use the WIG effect — although most aircraft are not designed for long-range, low-altitude flight. The closer the wing is to the ground (or water), the greater the amount of lift. The larger the WIG craft, the more efficient it is when compared with a smaller craft flying at the same altitude.

load with 35 percent less fuel consumption than similar-sized aircraft and 75 percent less fuel than comparable-sized hydrofoil ferries. Further, the infrastructure requirements for WIG technology is substantially lower than for aircraft or ships. ¹⁵ WIG craft travel nearly as fast as aircraft using much less fuel. They are normally based on a body of water but can take off and land on ground or water and do not need a developed airfield or port to function.

The WIG effect refers to the dense cushion of air that develops between a wing and the water (or ground) surface when they are close together. Seabirds use the WIG effect to skim the water's surface, for hours at a time, barely flapping their wings. Every aircraft experiences the WIG effect as it takes off and lands. Pilots of damaged aircraft conserve energy or use the power of remaining engines more efficiently by dropping down to sea-skimming level to use the WIG effect—although most aircraft are not designed for long-range, low-altitude flight. The closer the wing is to the ground (or water), the greater the amount of lift. The larger the WIG craft, the more efficient it is when compared with a smaller craft flying at the same altitude. The figure shows how placing a winged craft in ground effect produces the effect of a much larger wing area without actually increasing wing size. 16

WIG technology has particular appeal to military logisticians. WIG craft can move heavy loads rapidly across the ocean and land—on an undeveloped beach or further inland—and can fly around bad weather. Since it is flying 3 to 90 feet above the ocean surface, it is hard to detect using radar, infrared or satellite. It can presently fly in excess of 400 miles per hour and carry over 500 short tons. WIG craft can fly over water, sand, snow or prairie. It can also fly up to an altitude of 3,000 meters, but then it loses its fuel-saving advantages. Russian ana-



lysts consider WIG technology so developed that the United States could build a 5,000 ton, ocean-skimming WIG craft with a 1,500-ton capacity, 20,000 kilometer (12,420-mile) range, and a 400 kilometer-per-hour (250 mile-per-hour) speed. Such a craft could deliver 1,200 tons of military equipment and cargo plus 2,000 soldiers. 18

WIG craft externally resemble airplanes. They have two huge wings mounted on the hull. The craft uses a turbofan/turboprop or a jet aircraft engine for propulsion. It employs a vertical rudder, horizontal rudder, wing flaps and a stabilizer to control the craft's heading and maintain its flight altitude. Its fuselage and wing structure share aircraft characteristics. Most of its on-board equipment and instruments come from aircraft. Yet, a WIG craft is not an aircraft. An aircraft relies on the flow of air past the wings for the lift needed to fly. A WIG craft uses ground effect to fly low—between 0.8 and 30 meters above the sea's surface. Most aircraft cannot do this for extended periods. 19

A Bit of History

Research on WIG effect began in the 1920s. In 1935 the first WIG craft were patented in Finland. Finnish engineer T. Kaario built what he called the "wing-ram" craft in that year. The Soviets began building such craft in the late 1950s and gave the prototypes the designation *ekranoplan*. In 1963, the "Caspian Sea Monster" appeared on the waters of the Soviet Union. It was 92 meters (100 yards) long and 22 meters (24 yards) high with a 37-meter (40.5-yard) wingspan. Nicknamed the *Korabel Maket* (ship model), it could lift off at 544 tons and cruise at 280 miles per hour (mph). Lift and thrust were provided by thirteen 98kN (kiloNewton) turbojet engines. Eleven of the engines lifted the craft from the water and two provided its cruise power. It took off and landed on water and flew at 10 feet above the surface. Due to its shallow draft, it could load and unload in shallow, undeveloped ports. This craft crashed in 1980.

The Soviets went on to build other smaller WIG craft. The first, *Orlyonok* (Eaglet), of a planned 120 appeared in 1972. It was 58 meters

Since the collapse of the Soviet Union, Russia has continued to research, design and produce WIG craft for domestic and international sales. In addition, Great Britain, China, Germany, Finland, Japan, South Korea, Australia and Montenegro have all conducted WIG craft research and production. The US Air Force considered WIG technology but built the C-5 instead.

A WIG craft is not an aircraft. An aircraft relies on the flow of air past the wings for the lift needed to fly. A WIG craft uses ground effect to fly low—between 0.8 and 30 meters above the sea's surface. Most aircraft cannot do this for extended periods.

(63.5 yards) long, 16 meters (17.5 yards) high with a 31.5-meter (34.5-yard) wingspan. It could lift off at 140 tons and carry 20 tons of cargo. Two 98kN turbofan engines provided the lift while a 11.3 MW turboprop engine provided the cruising speed of 217 mph at 6 feet above the water's surface. Three of these craft were actually built.²⁴ The Central Hydrofoil Design Bureau, named after R.E. Alekseev, located in Gorky (now Nizhni Novgorod) designed and built the *Lun'* (Harrier) and *Spasatel'* (Rescuer) WIG craft for the Soviet and Russian Navy. It also built the small *Strizh* (Martin) WIG trainer craft. At least five other variants of WIG craft were also built—many of them still operating safely over the busy waters of the Caspian Sea.

Since the collapse of the Soviet Union, Russia has continued to research, design and produce WIG craft for domestic and international sales. In addition, Great Britain, China, Germany, Finland, Japan, South Korea, Australia and Montenegro have all conducted WIG craft research and production. The US Air Force considered WIG technology but built the C-5 instead.

China, a great power in the Pacific, is particularly interested in WIG technology. Chinese analysts attribute the following advantages to WIG craft over conventional ships and aircraft:

- Superb mobility. A WIG craft travels above the water's surface in air that is 800 times less dense than water. Traveling in air greatly decreases the drag exerted on ordinary vessels and greatly increases the craft's speed. Fast sea transports have a top speed of 20 knots. A conventional warship has a maximum speed of 30 to 40 knots, and although the hulls of hydrofoil craft and hovercraft travel above the water, their hydrofoils and their aprons still come in contact with the water. Thus, their speed is limited to between 70 and 80 knots or less. But a WIG craft can travel between 300 and 400 knots.
- Superb airworthiness. A WIG craft is very airworthy and can fly around bad weather or above a stormy sea. Since a WIG craft is not pounded by storm waves, it is also remarkably seaworthy.
- Ease of operation. A WIG craft is controlled through its vertical rudder, its elevator and its wing flaps. It is simpler to fly than an airplane, and it turns easily.
- Economical operation. Pressure under the wings of a WIG craft increases greatly by flying fairly close to the water. Consequently, only 80 to 130 horsepower are required to propel each ton of weight. The high lift-drag ratio means that fuel consumption is lower and cruising radius is greater than similar-sized aircraft. WIG craft are far superior to ordinary aircraft and helicopters in carrying capacity, speed and cruising radius when using the same power.
- Convenient maintenance. WIG craft do not need permanent shore bases. Unlike other high-speed craft, they can come ashore under their own power and do not need cranes or chutes. Furthermore, since they have no aprons like hovercraft, maintenance is very convenient. WIG craft do not have to make a gliding takeoff from the water or land on the water like seaplanes, which reduces corrosion from sea water.
- Diverse flight modes. WIG craft fly quickly and steadily above water, beaches, marshes, grasslands, deserts, glaciers and snow-covered land.
- Flight safety. Should the engines fail, WIG craft can travel on the water like conventional ships. These stable craft have operated for many years. Some WIG craft vent their engine exhaust forward beneath the wings of the craft to increase dynamic lift, assist takeoff and improve amphibious performance and flight safety.



• Military applications. The speed, maneuverability, amphibious capability and stealth of WIG craft are greater than that of other craft. Their fast, low-altitude approach may allow them to become the next generation of fast-attack craft, replacing hydroplanes and hydrofoils.

Since WIG craft usually fly within 50 meters of the surface, they are in the blind zone of radar sweep and search. The ultralow altitude of WIG craft leaves no traces on the water's surface and is difficult to detect by radar, which greatly increases the concealment and surprise attack capabilities of the craft. This extraordinary concealment capability has extremely important military significance. WIG craft may be used as landing craft and for rapidly and effectively moving troops in a campaign. The low flying altitude, the long cruising radius and the carrying capacity of WIG craft may be increased. WIG craft are also suited for antisubmarine patrol craft, high-speed minelayers, minesweepers and rescue craft.²⁵

Neither Fish Nor Fowl

A US Army separate mechanized brigade, with all its personnel and equipment, weighs in at 26,649 short tons (69,623 metric tons) and requires 97 containers (20-foot) for conventional shipment. This brigade could be moved on 11 WIG craft, each designed to move 2,500 tons. So, why don't the US Armed Forces have WIG craft to move the Army rapidly where it is needed?

The first issue—is a WIG craft a naval or an air asset? The US Navy has not included WIG craft in its future procurement program, probably because no surface vessel in the entire Navy can keep up with it. While the Navy did have a long relationship with American seaplane designers from Glenn Curtis to Howard Hughes, the Navy lost interest in seaplane development in the 1950s when it discounted jet-powered seaplanes as a nuclear bomber platform. Interest in transport seaplanes ended a decade earlier with the abandonment of Howard Hughes' H-4 "Hercules" prototype—a project designed to enhance strategic deployment capabilities over long distances. There was one flight by Hughes' enormous Spruce Goose flying boat. On 2 November 1947, it flew 70 feet over the water for one mile at a top speed of 80 mph. It was the first and only example of a large-platform WIG flight in US history.²⁷ Successful WIG development could pose a serious challenge to exist-

US interest in transport seaplanes ended a decade earlier with the abandonment of Howard Hughes' H-4 "Hercules" prototype—a project designed to enhance strategic deployment capabilities over long distances. There was one flight by Hughes' enormous Spruce Goose flying boat. It was the first and only largeplatform WIG flight in US history.

Since WIG craft do not fit neatly in either the Navy's or Air Force's comfort zone, and since the Army is the only service without strategic mobility, perhaps the WIG craft belongs in the Army as part of Army Aviation or the Transportation Corps. With WIG craft, the Army could move its heavy elements rapidly to the crisis area—regardless of the presence or lack of secure ports and airfields.

ing naval platforms because WIG warships would have tactical and technical characteristics far superior to existing surface warship classes, and a naval race over the application of WIG technology to warfare at sea could negate capital advantages that the US Navy enjoys with its current surface combatants.

The US Air Force is also not interested and does not procure transport aircraft that can routinely operate from dirt or water. The Air Force prefers to operate only from permanent hardstand airfields. However, the need for rapid strategic deployability, which drove the development of Hughes' flying boat, is a chief concern for US defense planners and a major consideration in transforming the Army.

Since WIG craft do not fit neatly in either the Navy's or Air Force's comfort zone, and since the Army is the only service without strategic mobility, perhaps the WIG craft belongs in the Army as part of Army Aviation or the Transportation Corps. With WIG craft, the Army could move its heavy elements rapidly to the crisis area—regardless of the presence or lack of secure ports and airfields. The Army could deploy with full combat power while the Navy and Air Force could continue their traditional Title 10, *United States Code*, roles by providing longer-term logistic support. WIG technology is not new and other countries are adopting it. Perhaps it is time for the United States to embrace this technology and provide strategic mobility to its Army.

WIG: Enhancing Timely Deployment

WIG technology is not the sole solution to overcoming the tyranny of time and distance in the Pacific and other theaters. But it does represent a potential force-deployment enhancement at a time when the United States retains a wide range of distant commitments and faces the prospect of serious declines in forward infrastructure.

Upcoming negotiations with Japan over sharing defense burdens may provide some indications on the probable scope and scale of US defense infrastructure that will be in place in 10 years. 28 In South Korea the government has undertaken an expanded defense burden, assuming the eventual withdrawal of US forces from Korea.²⁹ North Korean seems to have stabilized its domestic situation and continues to pour resources into its military establishment—a point made by General Thomas A. Schwartz, commander in chief. United Nation Command/Combined Forces Command and Commander US Forces, Korea, in his recent testimony before the Senate Armed Services Committee.³⁰ Recent defense budget increases in the People's Republic of China and greater stridency over the issue of Taiwanese independence have gone hand-in-hand with a developing arms race in Asia and threaten conflict in the region.³¹ When the destabilizing developments in the Indian Ocean are added, the requirement becomes pressing for the United States Army to overcome the tyranny of time and distance and be the cornerstone of US power projection in the Pacific. Compelling reasons abound for a second century of American presence in the Pacific—and elsewhere. WIG might just get us there. **MR**

NOTES

^{1.} Walter Kross, "The Joint Force Commander and Global Mobility," *Joint Forces Quarterly* (Spring 1998), 61. 2. Written Statement of Admiral Dennis C. Blair, USN Commander in Chief, US Pacific Command, "House Armed Services Committee On Fiscal Year 2000 Posture Statement," 3 March 1999 at https://www.pacom.mil/homenage.asp.

^{3.} Harry G. Summers, Jr., "The Korean War: A Fresh Perspective," Journal of Military History (April 1996) at https://dxitcles/0496_text.htm; T.R. Fehrenbach, This Kind of War (New York: Macmillan Company, 1963), 659-660. The US Army Pacific, charged with the ground mission within US Pacific Command has made this Fehrenbach quote its masthead statement at http://www.usarpac.army.mil/htm; Fehrenbach invoked the idea of a professional army acting as a constabulary force as a necessary attribute of US national power during the Cold War. Current operational tempo and strategic engagement make that point even more apparent in this post-Cold War world.

WING IN GROUND EFFECT

4. Brian McAllister Linn, *The Philippine War*, 1899-1902 (Lawrence: University Press of Kansas, 2000), 13-15.
5. Secretary of Defense William Cohen, Report on The United States Security Strategy for the East-Asia-Pacific Region (Washington, DC: US Department of Defense, 1998), 11.
6. James F. Schnabel, "Policy and Direction: The First Year," In *United States Army in the Korean War* (Washington, DC: United States Army, Office of the Chief of Military History, 1972), 80-99.
7. Charles C. Krulak, "Operational Maneuver from the Sea," *Joint Forces Quarterly*, (Spring 1999), 78-86.
8. Eric K. Shinseki, "Address to the Eisenhower Luncheon, 48th Annual Meeting of the Association of the United States Army," on 12 October 1999, https://www.hqda.army.mil/ocsa/991012.html>.

8. Eric K. Shinseki, "Address to the Eisenhower Luncheon, 48th Annual Meeting of the Association of the United States Army," on 12 October 1999, http://www.htqda.army.mil/ocsa/991012.html.

9. Ibid.

10. Defense Technical Information Center (DTIC), Mobility Forces (Fort Belvoir, VA: DTIC, 1997), http://www.dtic.dla.mil/execsec/adr95/mobility4.html.

11. Myron Hura and Richard Robinson, Fast Sealift and Maritime Pre-positioning Options for Improving Sealift Capabilities (Santa Monica, CA: Rand 1991), iv-X. Short-term advantage in initial speed of SES deployment are quickly overcome by the improved conventional transports' cargo tonnage over time. The marginal speed advantage of SES model is clearly not worth the costs and risks. An SES is not wing-in-ground which offers a radical increase in speed and enhanced cargo handling capabilities. The WIG vessels would be designed to work over the beach and not through congested ports.

12. Russell F. Weigley, History of the United States Army (New York: MacMillan, 1967), 461-471.

13. VI. Denisov, "Spasatel Search and Rescue Ekranoplan," Sudostroenie, (January 1995), 9-12; Viktor Mikhaliovich Ratushin," Alf Force Day: The Border Knows No Calm, Just as the Border Troops Aviation Does Not," Armeiskly sbornik, (August 1997), 27; and opening statement by E. Primakov, Winster of Foreign Affairs of Russia at the Fourth ASEAN Regional Forum Meeting in Kuala Lumpur 27 July 1997, as reported by World News Connection (FBIS): FTS19970/27000502. The Spasatel' search and rescue ekranoplan has a displacement of 500 tons and has been developed for the Russian navy to provide rapid search and rescue capabilities in the case of major maritime disasters like the loss of the SSN Komsomolets in 1989, Russia's Federal Borriegn Minister of Foreign Minister primakov used the ASEAN summit in 1997 to support the development of 400 tons and can carry up to 500 persons and h

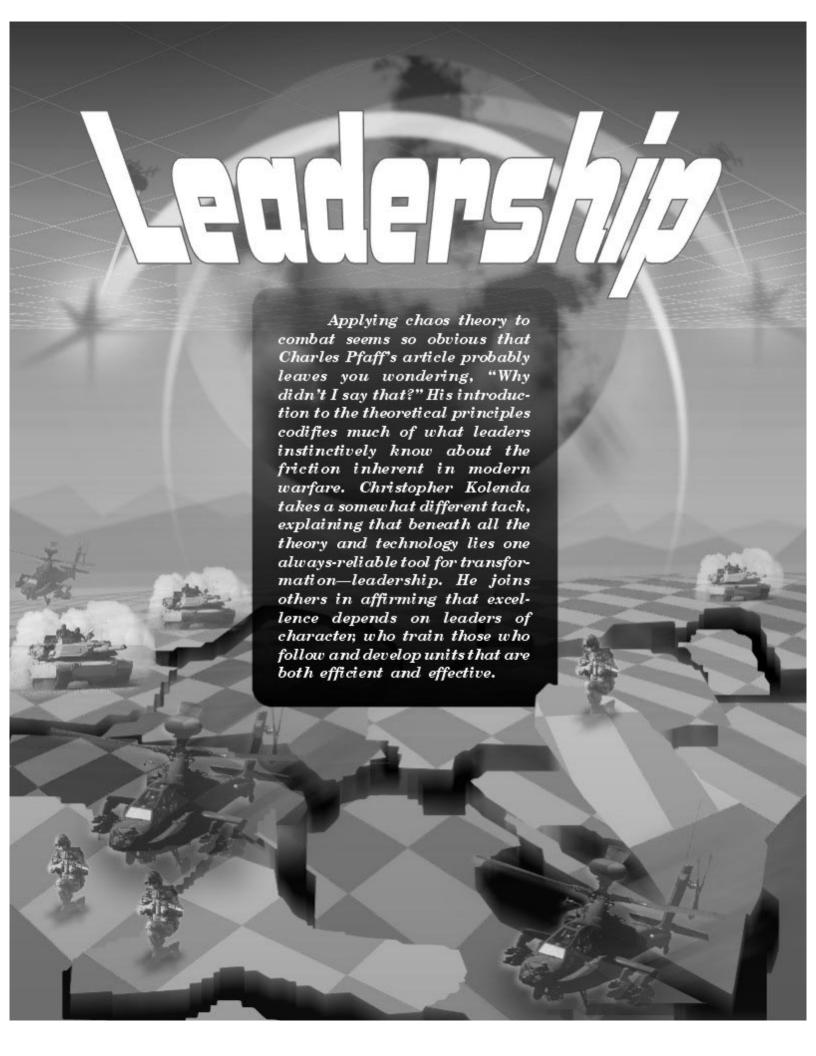
- Zis. Zhang Xu, 30-31.
 Zhang Xu, 30-31.
 Military Traffic Management Command Transportation Engineering Agency (MTMCTEA), Reference 97-700-Deployment Planning Guide: Transportation Assets Required for Deployment (Newport News: MTMCTEA, July
- Deployment Planning Guide: Iransportation Assets Required for Deployment (Newport News: MTMCTEA, July 1997), A-8.
 The Capt. Michael King Smith Evergreen Aviation Educational Institute, "The Hughes Flying Boat," specifications at http://sprucegoose.org/sprucegoose/history/instory1.htm.
 Joseph Coleman, "Tokyo Argues US Forces Too Costly," Washington Times, (10 March 2000), 15.
 Stratfor Asia Analysis, "South Korea Preparing For US Troop Withdrawal," 9 March 2000, at http://www.stratfor.com/asia/commentary/0003090043.htm
 Statement of General Thomas A. Schwartz, Commander-in-Chief United Nations Command/Combined Forces command and Commander United States Forces Korea, before the Senate Armed Services Committee, 7 March 2000
- 2000.

 31. Charles Hutzler, "Chinese Military Gets Large Budget Boost," Washington Times, 7 March 2000, 1; and Harvey Sicherman, "China's Three Ifs," Foreign Policy Research Institute, 4 March 2000, at <fpri@fpri.org>; Robert Wall, "Space, New Technologies Shifting Air Force Strategies," Aviation Week & Space Technology, 6 March 2000, 51; and Corwin Vandermark, "Chinese Navy One Of Many Arming Up In Asia," CDI Weekly Defense Monitor, 10 March 2000, at <cvanderm@cdi.org>.

Lieutenant Colonel Lester W. Grau, US Army, Retired, is a military analyst in the Foreign Military Studies Office, Fort Leavenworth, Kansas. He received a B.A. from the University of Texas at El Paso and an M.A. from Kent State University. He is a graduate of the US Army Command and General Staff College (CGSC), the US Army Russian Institute, the Defense Language Institute and the US Air Force War College. He held a variety of command and staff positions in the Continental United States, Europe and Vietnam, including deputy director, Center for Army Tactics, and chief, Soviet Tactics Instruction Branch, CGSC; political and economic adviser, Headquarters, Allied Forces, Central Europe, Brunssum, the Netherlands; and diplomatic courier, Moscow. His article "Urban Combat: Confronting the Specter" appeared in the July-August 1999 issue of Military Review

Jacob W. Kipp is a senior analyst with the Foreign Military Studies Office, Fort Leavenworth, Kansas. He graduated from Shippensburg State College and received a Ph.D. from Pennsylvania State University. He has been published extensively in the fields of Russian and Soviet military history and serves as the American editor of the journal European Security. He is an Adjunct Professor of History with the University of Kansas and teaches in the Soviet and European Studies Program. His articles "Urban Combat: Confronting the Specter" and "Russia's Northwest Strategic Direction" appeared in the July-August 1999 edition of Military Review.

WIG represent a potential force-deployment enhancement at a time when the United States retains a wide range of distant commitments and faces the prospect of serious declines in forward infrastructure. The requirement becomes pressing for the United States Army to overcome the tyranny of time and distance and be the cornerstone of US power projection in the Pacific.



83 Chaos, Complexity and the Battlefield

by Major Charles A. Pfaff, US Army

The concepts of chaos and chaotic systems, once sole concerns of the mathematician, have found a place in a variety of other professions as well. A growing body of literature applies the insights of chaos theory to a variety of fields, including organizational behavior and military science. In fact, an entire web page is dedicated to the application of chaos and complexity theories to Clausewitz's works. The US Marine Corps even mentions chaos theory in Doctrinal Publication 6, *Command and Control*. This article aims to render chaos theory accessible without trivializing it, so that Army officers can better grasp and apply the insights offered by chaos theory and better understand their own profession. In Doctrinal Publication 6, a fictional general tells his staff that chaos theory means they must remain flexible. Even a qualitative understanding of chaos theory can tell us much more than that.

To reduce confusion on the battlefield, the Army has developed better and more sophisticated information gathering and processing technologies. However, applying these technologies increases the complexity of the battlefield and thereby increases the likelihood of chaotic behavior—all of which increases confusion. Understanding this process will give Army officers an advantage they do not currently have. Military leaders who methodically apply chaos theory can develop policies and doctrines that can help them deal better with the unexpected events and circumstances that increasingly characterize the modern battlefield.

Several times in recent years, the United States and its allies have applied military force with unexpected results. During the Gulf War, coalition forces routed an enemy that was roughly equal in terms of numbers and equipment. While the coalition expected victory, it also expected tens of thousands of friendly casualties. Instead, there were less than two hundred. In Somalia, a technologically disadvantaged gang leader took on the world's only remaining superpower, surprised military planners and won. These events caught off guard those who no longer properly understand the nature of the battlefield. Since the beginning of World War II, the battlefield has become increasingly complex and, consequently, much more unpredictable.

The Battlefield as a Chaotic System

The first step in applying chaos theory to the modern battlefield is to establish that it is indeed a chaotic system. If unexpected events are the results of random chance, then applying chaos theory will offer little insight. Chaotic systems are not random systems, and thus their outcomes are not accidental, but rather the result of complex interaction among the system's components. While these outcomes are usually impossible to predict, the process that yields them is not impossible to understand.⁴ In a random system, at some level at least, there is no process to understand. If battle is no more than a random process, then the fictional general in Doctrinal Publication 6 is right: the best we can do is remain flexible.

The battlefield is made up of a variety of components that interact with each other to form a system. In fact, the battlefield is a system of systems, with complex and dynamic interaction among all components. While this has always been the case with battle, since World War II complexity of this system has

dramatically increased. This is not to say the battlefield before World War II was not complex, but with the advent of modern weapons and technology, the battlefield has become so complex that the nature of the system itself has changed. As systems increase in complexity, they are more likely to become chaotic. In chaotic systems, small changes can have enormous and surprising effects.

A chaotic system results from the interaction of subsystems that vary nonlinearly. In such systems, the subsystems are coupled, which means that the state of any particular subsystem affects the state of the other subsystems.⁵ Since the values that describe the subsystems vary in an irregular way, the state of the system itself varies irregularly. When three or more such subsystems comprise the larger system, the state of the larger system becomes much more sensitive to small disturbances. In fact, the more subsystems there are and the more coupling between them, the more likely chaos is.⁶ Likewise, the modern battlefield, comprised of so many related systems, can be chaotic.⁷

The state of a battle at any given time is determined by the interaction of the combat power of the two opposing forces. Combat power is the dynamic interaction of maneuver, firepower, protection and leadership. Considering the battlefield as a system means treating combat power of the two opposing forces as subsystems and the elements that com-prise them as additional subsystems. These additional subsystems are further comprised of more subsystems. All of these subsystems interact in such a way that each subsystem's state affects the state of all the other subsystems. Since the state of the larger subsystem, combat power, also affects the state of the opposing force's com-bat power, the fluctuations of the additional subsystems of one force are coupled to the state of additional subsystems of the opposing force. In this way, a fluctuation in one side's leadership, for example, can have an affect on the other side's protection and vice versa. We can visualize these relationships as illustrated below.

The Battlefield System

Since the beginning of World War II, many elements have been added to these subsystems that make their interactions significantly more complex than in previous wars. Technological developments and doctrinal advancements in strategic and tactical air power, armor detection devices such as infrared and thermal sights, and the dramatic advancements in electronic warfare and information technology have drastically changed the nature of the elements of combat power and how they interact with each other. Furthermore, faster interactions based on the maneuver speed and information flow have made the system much more dynamic. Combined, these developments have made it much more likely that small fluctuations in the system will have dramatic consequences for the overall state of the system—the hallmark of chaotic systems.

The modern battlefield will not always exhibit chaotic behavior, but these developments make it more likely. The Western Front in World War I was a much less complex system than its World War II counterpart. When forces engaged, they quickly reached equilibrium. If one force

Combat Power Force A Combat Power Force B

Maneuver Firepower Maneuver Firepower

Protection Leadership Protection Leadership

was far superior to the other, equilibrium would return through the quick defeat of the smaller force. If the forces were evenly matched, the equilibrium would surface in a stalemate. The exasperating years of stagnant trench warfare marked a stable battlefield.

In effect, the Western Front in World War I had reached an equilibrium in which forces tended to cancel out one another. In such a system, the only way to effect change is to apply enormous amounts of force. Indeed, to finally break the stalemate the Allies applied massive combat power at a time when the Germans had exhausted their own. ¹² In World War II, however, when weapons, doctrine and transportation were considerably more developed, the battlefield was a much less stable place and defied World War I's infamous stagnation.

The increase in complexity of the World War II battlefield not only defied stagnation; it also yielded many surprises, begin-ning with the French army's rapid destruction in May and June 1940. In both numbers and quality, the Germans approximately equaled the French and a small British Expeditionary Force. In fact, the French and British tanks, while a little slow-er, were more powerful and better armed than their German counterparts. The Germans did have more aircraft than the Allies, but not great enough to account for the rapid and total German victory. If Given that the French and British had the advantage of the defender, their defeat should not have been so quick.

Rather than relying on overwhelming force, which they did not have, the Germans introduced instability in the system in a way for which the Allies were unprepared. By attacking in unexpected locations and using tanks and aircraft in ways the Allies did not anticipate, the Germans introduced instability in the system and turned small, tactical successes into larger, strategic ones. The Allies, relying heavily on fortifications and slow-moving but powerful formations, were unable to react quickly enough to stem the German advance. Fast-moving armored and motorized units supplemented by the devastating effects of Stuka dive-bombers—which often served as artillery—quickly overwhelmed the Allies.

By destabilizing the system in such a way, the Germans took advantage of small changes in the system. In fact, the breakthrough near Sedan on 13 May 1940 is a good example of the dramatic effects of small change and the exploits of an opportunistic enemy. At 6:15 pm on 13 May, a French artillery battalion commander received a message that German tanks were nearby and that his battalion should move. Fifteen minutes later, one of his battery commanders reported small arms coming from German tanks. As things turned out, the messenger was a spy, and the battery commander was mistaken about the presence of tanks as well as the severity of the small arms fire. It is also not clear whether the small arms fire actually came from Germans, since their records do not report any of their units near that area at that time.

Nonetheless, the damage was done. Because of this faulty information, the battalion commander asked for and received permission to move his command post. This premature move had a ripple effect among other artillery units, and by 8:00 pm an entire division's worth of artillery was in full retreat. This evacuation left the entire French 55th Infantry Division without artillery support and made German penetration at Sedan relatively easy. Within hours, the Germans were 10 kilometers behind French lines. This modest gain set the stage for further gains that eventually caused the French and British armies' rapid destruction and the fall of France. 15

German soldiers examine the remains of a French armored formation, 1940.

In this case, a small fluctuation in leadership dramatically affected fire support, which then



greatly affected maneuver. Moreover, since negative effects on one side's system correspond to positive effects for the other side, this small ripple in one side's leadership ended up having a dramatic, positive effect on the other side's maneuver. Because of the increased complexity of the system, a message to a lieutenant colonel

and a telephone call from a captain, the Germans were able to penetrate several kilometers behind the French lines in one night.

Significance of Increased Complexity

This increase in complexity requires us to think of surprise in a different way. Current doctrine describes surprise simply as finding the enemy in a place or at a time for which he is unprepared. Thus, the only way to avoid surprise to know always where the enemy is. In fact, much of the technology associated with Force XXI is designed to increase the commander's ability to locate the enemy. Satellite imaging, thermal and light amplification devices, and rapid data and image transmission all help the commander visualize the battlefield.

But while reliance on technology may provide more information, it also makes the system more complex. By making the system more complex, it makes the system more chaotic. By making the system more chaotic, these new technologies make what happens in the system more unpredictable.

Although it is impossible to predict the state of a chaotic system at any future time, useful strategies can make the inherent instability of the system work in our favor. First, it is important to understand the system as completely as possible—not for predictive power, but to plan better for contingencies. What happened to the French in 1940 underscores the need for contingency planning. On a battlefield where small changes can have dramatic and unpredictable effects, commanders must remain flexible, ideally with fully resourced contingency plans that ac-count for enemy responses and effects throughout the system. Contingency plans are therefore important for maneuver and support units at all levels.

Second, the inferior force may benefit more from destabilizing the system. In France in 1940, a message to one relatively low-ranking commander profoundly affected the defense of an entire nation. By being prepared to exploit such an effect, the Germans turned what should have been a long campaign into a quick victory. Presumably, even a seemingly minor capability to restrict or alter information flow across echelons of command (whether by deception, jamming or destruction of communication facilities) could give an enemy, no matter how weak militarily, great advantage. If nothing else, this uncertain dynamic underscores the need to take information warfare seriously at all levels. In fact, on the chaotic battlefield, no advantage—enemy or friendly—is unimportant.

This analysis, while incomplete, does suggest that battlefield's increased complexity is an important development that military leaders and planners need to account for as they develop the systems and doctrines to fight the next war. Yet as they add new systems, the battlefield becomes more complex and more unpredictable. Nonetheless, military leaders and planners can use an understanding of the battlefield as a chaotic system to develop strategies, doctrines and courses of action that more effectively handle this increased complexity. Recently, Slobodan Milosevic dramatically resisted American foreign policy goals, despite the overwhelming political and military force arrayed against him. Judging from the news reports, his resilience surprised the United States and its allies. Understanding the battlefield as a

chaotic system can account for such possibilities and suggest ways to prepare for and manage the uncertainty of modern war. *MR*

- 1.See referenced website at http://www.mnsinc.com/cbassfrd/CWZHOME/Complex/PropBibl.htm.
- 2.US Marine Corps Doctrinal Publication 6, *Command and Control* (Headquarters, US Marine Corps, 4 October 1996).
- 3.Ibid., 23.
- 4.James Gleick, *Chaos: Making a New Science*, (New York: Penguin Books, 1988), 11-31. Gleick shows that even when weather forecasters could accurately model a weather system, they still could not predict the outcomes of that system.
- 5. Stephen H. Kellert, In the Wake of Chaos (Chicago, IL: University of Chicago Press, 1993), 5
- 6.David Ruelle, Chance and Chaos (Princeton, New Jersey: Princeton University Press, 1991), 81.
- 7.The conditions for chaos do not necessarily produce a chaotic system. In large systems, for example, irregularities in the subsystems may cancel each other out in a "smoothing effect." For example, one or two stocks fluctuating wildly will not usually, by themselves have a dramatic impact on the stock market, though the stock market does have the characteristics of a chaotic system. Stability in a system that has chaotic characteristics is evidence that this effect is occurring. Since we do not generally observe this stability on the battlefield, it seems safe to conclude in many, if not most circumstances, that the battlefield is indeed chaotic. I am grateful to LTC Phil Beaver of the Department of Math, US Military Academy, for this insight.
- 8. This section offers a broad-brush, qualitative description of the battlefield as a system. While it is useful to describe the battlefield system quantitatively (showing the relationships of the different elements using mathematical equations) and in more detail, this qualitative description sufficiently establishes the likelihood that the battlefield is a chaotic system.
- 9.US Army Field Manual (FM) 100-5, *Operations* (Washington, D.C.: Government Printing Office [GPO], 14 June 1993), 2-10.
- 10. These additional subsystems include the weapons, equipment and organizations that make up the fighting force under consideration.
- 11. This two-dimensional representation obscures the fact that subsystems of one force can directly and indirectly affect subsystems of the other force.
- 12. William R. Griffiths, *The Great War*, The West Point Military History Series, Thomas Greiss, ed. (New Jersey: Avery Publishing Group, 1986), Chapter 9.
- 13.Larry H. Addington, *The Patterns of War since the Eighteenth Century* 2d ed. (Bloomington, IN: Indiana University Press, 1994), 203-204. The Germans had 2600 tanks and 3700 aircraft organized into 136 Divisions. In contrast, the British and French had 3000 tanks and 1800 aircraft organized into 118 divisions.

14.COL Robert Allan Doughty, *The Breaking Point: Sedan and the Fall of France*, 1940 (Hamden, CT: Archon Books, 1990), 3-4.

15.Ibid., 195-197.

16.FM 100-5, Operations, 7-10

Major Charles A. Pfaff is an assistant professor of Philosophy, Department of English, US Military Academy, West Point, New York. He received a B.A. from Washington and Lee University and an M.A. from Stanford University. He has served in a variety of command and staff positions in the Continental United States and Germany, to include assistant Brigade S3, 1st Brigade, 1st Armored Division, Kirchgoens, Germany; S3, 3rd Battalion, 5th Cavalry Regiment, Kirchgoens; and commander, Headquarters and Headquarters Company, 3rd Battalion, 5th Cavalry Regiment, Kirchgoens.

Photo:

Etablissement Cinématographique et Photographique des Armées

Return to Table of Contents

87 Technology, Leadership and Effectiveness

by Major Christopher D. Kolenda, US Army

The Army's vision for transformation involves striking, almost revolutionary, technological innovations to enhance the information management and combat efficiency of what is arguably the finest land force in warfare's history. The smaller yet more lethal force, capable of rapid deployment to any remote corner of the globe, will be the world's most technologically advanced powerprojection instrument. Through innovations in guidance and information technology, the Army can place overwhelming ordnance on target with more speed, precision and accuracy and report the results faster than any of our potential foes can imagine. In fact, one might argue that we are in the midst of a lethality revolution.

The digital battlefield will fundamentally change uncertainty as well. Instantaneous tactical situation updates, precise reporting and navigation, and logistic data fed directly and accurately to all with the need to know and the capability to do something about it will reduce some factors related to battlefield uncertainty. Commanders and staffs will be able to make more informed decisions and transmit them immediately to the units responsible for applying them. While digital technology will inevitably result in some new and improved uncertainties, we should expect an order-of-magnitude increase in firepower and information efficiency.

The key issue is whether the development of an efficient force is sufficient. Technology can never eliminate human nature and the fog, error, unpre-dictability and heroism that come with it. If we accept that combat generally runs in observation-orientation-decision-action cycles, then digital technology will increase the speed and fidelity of our ability to observe, orient and decide. In a critical moment between decision and action, individuals and units either implement those decisions or refuse, and courage and resolution or fear and panic prevail. In that moment reigns humanity, which no amount of technology can overcome. The deciding factor in the critical moment is the quality of leadership and the resilience of the organization.

Technology certainly increases our efficiency, but we must accept that it is, in itself, an incomplete framework for creating the quality of force we need in the next quarter-century. As Greek philosopher Aristotle argued over 2000 years ago, "whenever skill and knowledge come into play, these two must be mastered: the end and the actions which are the means to the end." Greater efficiency through technology is an important means to the end, but it is not an end in itself. The true goal is the development of excellence.

To achieve excellence we must combine efficiency with things and effectiveness with people.³ True transformation means developing both components with equal vigor. If we focus solely on improving efficiency as a means to achieve excellence, but neglect human effectiveness, we will soon find that we have arrived at the wrong address.

Learning the Lesson

The experience of warfare in the early 20th century warns that when seeking battlefield excellence, technical innovation alone is no panacea. World War I, the first conflict to experience a fundamental

technological and communications revolution, showed the limits of technical solutions to battlefield effectiveness. The cable, the field telephone and in some cases the wireless telephone were the early 20th-century answers to the command and control nightmare created as mass armies locked in materiel warfare. These communications innovations, so it was thought, would give the command post real-time tactical information with which the commanders and staffs could make and transmit decisions ra-pidly. At Ypres, Verdun, the Somme and Passchen- daele soldiers went over the top while commanders and staffs went into bunkers and dugouts. While leaders armed with new communication technology manned telephones and awaited information on the progress of the offensive, their soldiers ventured into no man's land and were mowed down. The commanders and staffs were quite efficient, but their armies were completely ineffective. Not until 1917 did the Germans develop an intelligent response to the technologically driven attrition warfare.

This response, known as *Hutier* or storm troop tactics, was not merely a tactical improvement; it was a cultural innovation. Relying on the tradition of independence and initiative developed by Prussian General Gerhard Johann David von Scharn-horst and later refined by Prussian General Helmuth von Moltke, the Elder, the Germans developed a framework that restored fluidity to positional warfare. While the German Army eventually collapsed under the combined weight of the American, British and French forces and its own flagging morale, the doctrine of mission orders and decentralized execution had once again found currency. This doctrine (termed *Auftragstaktik* after World War II) was later used to devastating effect from 1939 to the winter of 1942—when Adolf Hitler and his henchmen, much to the dismay of many field commanders, rejected independence and initiative in favor of obedience and the "fixed defense." Later *Auftragstaktik* was employed in isolated incidents until 1945, but by then the culture of the *Wehrmacht* as a whole had fundamentally changed.

Auftragstaktik, the concept praised by advocates of maneuver warfare, was not so much a tactical doctrine, as many mistakenly believe, it was a cultural weltanschauung (worldview). Through Auftragstaktik the Germans were able to establish a paradoxical framework in which the martial virtues of discipline and obedience could coexist with independence and initiative. The commander's intent—what he wanted to accomplish—was the unifying force in tactical and operational decision making. Within this framework the subordinate commanders were expected to use their initiative and judgment to fulfill the commander's intent and act independently when their initial orders no longer reflected the reality of a changed situation—as long as their actions operated within the framework of the commander's intent. To illustrate this point, German officers often pointed to the admonishment by Prince Frederick Charles to a blundering major who claimed that he was just following orders: "His majesty made you a major because he believed that you would know when not to obey his orders." With this particular cultural mindset the German army achieved qualitative excellence and defeated opponents who were often numerically and technologically superior.

Choosing the Right Path

We are at a crossroads today not unlike that which faced our predecessors in World War I. The significant technological breakthroughs that we are about to embrace offer us some important choices. We can travel along the path of centralization and place a primacy on efficiency as did our predecessors in World War I, or we can move along the path of excellence by coupling efficiency through technological innovation with effectiveness through the development of leadership, institutional culture and organizational climate.

Loosely defined, culture is the set of shared values, beliefs and behavioral patterns of a given society or collectivity. Culture establishes a coherent behavioral framework within which the members are voluntarily expected to act. Army values encapsulate our institutional culture. Additionally, according to Army leadership doctrine, "an organization's climate is the way its members feel about their organization. Climate comes from people's shared perceptions and attitudes, what they believe about the day-to-day functioning of their outfit." As professional soldiers, leaders need to address issues of culture and climate along with those of technology. Technology leads to efficiency, but effectiveness is only achieved through a healthy culture and climate. Ultimately, the nature of the institutional culture and organizational climate primarily determine the difference between excellence and ineffectiveness. Developing leadership should be the first priority since it is the key to forging an effective organizational climate.

US Army Field Manual 1005, *Operations*, asserts that leadership, rather than firepower, protection or maneuver, is the most important dynamic of combat power, which suggests where attention should focus. And yet, day to day the more-visible aspects of combat power are all-consuming, and even over the long-term challenges such as the impact of technology are familiar distractors. Perhaps even more troubling is the use of information technology to micro-manage subordinate leaders and organizations. The mere ability to gather and process information can increase the appetite for it, regardless of utility. Subordinate leaders then find themselves consumed with reacting and responding to directives and requests for information rather than exercising initiative and judgment within guidelines established by their leaders—a peacetime habit that could be disastrous in combat.

While enhanced technology improves efficiency with information and materiel, increased efficiency does not necessarily portend greater effectiveness with people. To paraphrase General George S. Patton, wars may be fought with weapons, but they are won by soldiers. Raising the qualitative level of excellence means increasing the effectiveness of units and soldiers through a revitalized attention to leadership and organizational climate.

Effectiveness through Results and Values

An effective organization combines desired performance results with healthy, shared values. The human force of leadership synergizes these results and values to form the organizational climate. A winning, healthy climate developed through leadership makes an organization effective. Because an organization is made up of component units, like any living organism, it is only completely healthy when all of its component units are. Therefore, the desired culture must be inculcated throughout the institution and the desired climate throughout Army organizations via the leaders. The task for organizational leaders is then twofold. First, they must clearly define and align results and values at the top; then develop subordinate leaders to operate willingly within that performance and behavioral framework. A simple typology illustrates the necessity of nurturing this synergy as well as the danger of affirming a "performance only" culture.

According to Jack Welch, CEO of General Electric, those in charge of units generally fall into one of four broad categories.⁶ The first type of leader accomplishes great results while upholding the values of the organization. This leader has established a healthy, winning climate inside the unit and is the type of person we need to recognize, reward, mentor and prepare for greater responsibility. The second type of leader accomplishes poor results with no values. This one is an easy call and should be encouraged to make a new career choice very quickly. The third type achieves poor results but still operates within the

values of the organization. Such people still have potential. Because they uphold the values of the organization, they should be coached, allowed to learn from mistakes and given the opportunity to improve. Given the chance and the mentoring, many of these soldiers will become leaders of the first type.

The last type of leader gets great results but fails to uphold the values of the organization. This situation is deceptive because the results are there. However, this person's dysfunctional behavior is dangerous and rewarding it is cancerous. ⁷ Left unchecked, it may lead to destructive competition and selfish individualism, both of which are anathema to an effective organization. We all realize that we should help this type of person make a new career choice as well, but instead we often find ourselves rewarding behavior we instinctively despise because of the results. This becomes our own leadership failure, and we must be willing to change our response to this type of person.

The fundamental difference between the third and fourth type of leader is the impact each has on the organization. Because the third type exhibits constructive behavior, training can overcome the shortcomings in results unless the person simply lacks ability. The fourth type exhibits destructive behavior, which has a decidedly negative impact on the organization as a whole. His unit may look good, but selfish individualism will compromise the overall organizational effectiveness.

Furthermore, the results attained by this sort of person are always short term. While the unit may look good from the outside, it is often rotting on the inside—shiny boots hiding trenchfoot. Subordinates will either be disillusioned by or will imitate the behavior of their superior, especially if that behavior is rewarded, and over a period of time the unit will always fall apart. Unfortunately, because leaders, particularly officers, remain in charge of units only briefly, the dysfunctional nature of the unit often becomes apparent only after the perpetrator has left. A person who proudly proclaims that the unit was great while he was there but fell apart after he left merely admits that his dysfunctional leadership focused on shortterm results with blatant disregard for the longterm, positive development of subordinates. An effective leader leaves behind an effective unit; a dysfunctional one leaves behind a dysfunctional unit. A unit takes on the character of its leader, and the impact is long lasting.

Restoring Character

Leaders are responsible to align results and values to train and evaluate subordinates against the backdrop of organizational climate. Just as clearly defined and attainable standards help achieve desired performance results, clearly defined values are crucial to organizational effectiveness. We then set the behavioral example by walking our talk and by holding our subordinate leaders accountable to that standard. An effective, healthy, winning organizational climate is achieved when we align results and values, hold ourselves accountable to those standards first, then expect the same of our subordinates.

For instance, if we consider teamwork as one of our critical organizational values, then attempting to improve results by pitting units against each other and rewarding the winner would be an example of a failure to align.⁸ In this scenario there is only one winner, and the rest are losers—we are talking teamwork but rewarding (walking) individualism. We can talk teamwork all we want, but all our subordinates will hear is individualism because actions diminish words.

On the other hand, if the competition is against a clearly defined performance standard and units are rewarded on the basis of meeting that standard, then we begin to align desired results with the value of teamwork. Everybody can win, nobody can win or a happy medium. Beating the standard is what matters

at the organizational level, not beating each other. We now begin to establish an environment in which teamwork can take place. The key is to train and reinforce the desired attitude and behavior and make the value of teamwork a reality in the organization.



A team of para-rescue specialists aboard a UH-60 Blackhawk work to save two "wounded" soldiers during an exercise in Korea.

Certainly, we will never completely eliminate people's desire to compete and outdo each other. Nor should we. Such competition can be very healthy and a spur to performance in the right context. The difference is whether we allow these tendencies to become dysfunctional behavior at the organizational level, or merely manifest themselves as friendly competition among team members. A good test of the system is to see whether the competition encourages the cross-talk and exchange ideas that make individual teams and the organization more effective.

Leadership plays the decisive role in formatting culture and climate. As a result, conscious choice to develop the leadership is necessary to foster healthy, winning organizations. In doing so, several points are important to inculcating this type of leadership and climate within an organization. First, leaders must rely on Army values as the cornerstone of effectiveness, both in terms of a leader's character and in terms of the organization as a whole. They then define these and other organization-specific values, making them as understood throughout the organization as performance standards. Using Appendix B of Field Manual 22-100, *Army Leadership*, leaders should integrate these values into monthly performance counseling and empower subordinates inform them of any alignment problems within the organization.

Furthermore, leaders must make clear the consequences of achieving shortterm results through dysfunctional behavior. Perhaps most important, they must realize that leadership based on character begins on the inside. Leaders must hold themselves to these standards first before expecting them of

anyone else—a soldier can spot a hypocrite very quickly and will never follow one. These important issues have no easy answers or quickfix solutions, but they are critical in creating effective Army units.

The Army needs to embrace sweeping technological innovations. Efficient communications, logistic and weapon systems are crucial to maintaining a qualitative edge over any potential foe. Efficiency, though, is only the lesser half of the battle. To achieve excellence, leaders need to invest at least as much energy in upgrading the unit effectiveness, developing leaders who live our institutional values and set the proper organizational climate. Technology can improve efficiency, but only leadership can enhance effectiveness. An effective organization accomplishes superior results within the framework of healthy, shared values and provides an environment within which people will naturally want to work together and excel. To achieve such excellence, the Army must develop these qualities of effectiveness through leadership with the same rigor devoted to efficiency through technology. *MR*

- 1.For further development see Christopher D. Kolenda, "Between Decision and Action: Leadership at the Critical Moment," *Armor* (May-June 2000).
- 2. Aristotle, Politics, Book 7, written in 350 B.C., trans. Benjamin Jowett, xiii, 1331 b24b39.
- 3. Stephen Covey, *The 7 Habits of Highly Effective People: Restoring the Character Ethic* (New York: Simon and Schuster, 1989), 1701.
- 4.Trevor N. Dupuy, *A Genius for War: The German Army and General Staff, 1807-1945* (Englewood Cliffs, N.J.: PrenticeHall Inc., 1977), 302307.
- 5.US Army Field Manual 22-100, *Army Leadership* (Washington, DC: US Government Printing Office, August 1999), 3-12.
- 6.Jack Welch, Chief Executive Officer of General Electric, uses this typology in outlining the importance of values in his organization. For a further discussion see Lynne Joy McFarland, Larry E. Senn and John R. Childress, eds., *21st Century Leadership: Dialogues with 100 Top Leaders* (New York: The Leadership Press, 1993), 152153.
- 7.Marcus Tullius Cicero, *De Officiis* (Oxford University Press, June 1994). Cicero wrote eloquently in cautioning the Romans to be wary of unprincipled people with unbridled ambition.
- 8. Another example is to talk initiative but then overmanage the daily activities of subordinates. Stephen Covey, *The 7 Habits of Highly Effective People: Restoring the Character Ethic*, uses the notion of alignment to discuss the causes of dysfunctional behavior in organizations, 229230.

Major Christopher D. Kolenda is the S3, 2nd Armored Cavalry Regiment, Fort Polk, Louisiana. He received a B.S. from the US Military Academy and an M.A. from the University of Wisconsin at Madison. He is a graduate of the US Army Command and General Staff College. He has held a variety of command and staff positions in the Continental United States and Germany, including S3, 3rd Squadron, 2d Armored Cavalry Regiment, Fort Polk; assistant professor, US Military Academy, West Point, New York; and commander, A Troop, 1st Battalion, 7th Cavalry Regiment, Fort Hood, Texas.

Photo:

Joint Combat Camera

Return to Table of Contents

Insights

Politics is Really Other Things

by Edward Bernard Glick ©1999

Editor's note: According to German philosopher and general Carl von Clausewitz, war carries out policy by other means. Therefore, what Glick says about political scientists also applies to those who study and fight wars.

No matter how political scientists define themselves, most of what people call "political" originates and gets its character, intractability and unsolvability from branches of knowledge outside of politics. Political scientists must learn philosophy, art, literature, languages, history, geography, demography, psychology, economics, sociology, anthropology and even physics, chemistry and biology. They must also learn how and to what extend other disciplines affect their own.

Can one be a good political scientist or politician without knowing which historical, geographic, economic, social, psychological and cultural factors trigger which actions and reactions between governors and governed? Can one be a good student of diplomacy or be a diplomat without realizing that it is not enough to know only foreign languages, international law and political and military strategy? One must understand negotiators' thinking and feelings as well as those of the people for which negotiations are being conducted.

Can one be a good student or negotiator of arms control without knowing the physical characteristics of the weapons of mass destruction and of the delivery systems that are to be controlled or eliminated or the fears and distrusts of the peoples and countries who amassed the weapons and systems in the first place? And, so far as the profession of arms is concerned, can one be a successful military officer, especially in the higher ranks, without amassing great knowledge and insight about the civil part of the civil-military equation in a democratic society?

Symbiosis

The symbiosis between politics and nonpolitics operates in both directions. For example, what would happen if the president of the United States were to die suddenly? If his death is a natural one, its cause is biological. If it is accidental, such as resulting from the crash of Air Force One, its cause might be the pilot's violation of the laws of aerodynamics. If he commits suicide, then psychology and psychiatry are key factors. And, if he is assassinated, the causal mixture involves, at the very least, criminology, ideology and politics.

Regardless of the circumstance, the president's death would produce immediate political and nonpolitical consequences. Stock markets would fall. So, too, would the value of the US dollar. Tourists would be afraid to travel. Investors would fear to invest. Consumers would put off purchases. Domestic programs would falter. Foreign wars would start or stop. And, the president's successor would bring his own persona, proclivities, priorities and policies to the Oval Office and to the nation.

Political Actualization

Politics is an important aspect of the human condition, and political science is an important academic

discipline. But problems only become "political" when and because a society is unable to handle them in the cultural, religious, economic, historical or other arena of human activity or when and because pressures from elsewhere push them across the "line of political actualization."

Take zoning, as an example. For the most part, zoning involves localized, low-level administrative or legal decisions on such issues as whether and where a service station, shopping center, or housing development should or should not be built in a particular place and time. Zoning decisions rarely receive statewide or national attention. However, they become highly visible, very political and widely known when used to keep Blacks from living next to Whites, Jews from living next to Christians or poor people from living next to rich ones. But, if the other sciences had discovered and disseminated the means of erasing racism, anti-Semitism and socioeconomic snobbery in the first place, would the US have highly politicized zoning problems in the second place?

If years ago, automakers had built safer and more pollutionfree cars; if the pharmaceutical industry had made sure its products were always safe and efficacious before putting them on the market; if toymakers and paintmakers had made certain their products were leadfree; and if chemical, mining and power companies had not dumped billions of tons of toxicity into our lands and waters, would there be a need for such government entities as the Environmental Protection Agency, the Federal Trade Commission or the Food and Drug Administration?

Being an Interdisciplinarian

Since most university professors do not acquire or share knowledge in an interdisciplinary manner, most university students also do not. One student was having difficulty focusing his graduate paper on French policy toward the US and Britain during the post-World War II leadership of French President Charles DeGaulle. I told him that, while grateful to the Allies for defeating Nazi Germany, DeGaulle resented the ensuing loss of French power and glory, even as he resented what he derisively called "AngloSaxon hegemony."

US President Franklin D. Roosevelt disliked and distrusted DeGaulle. English Prime Minister Winston S. Churchill lamented that of all the crosses he had to bear, the heaviest one was the Cross of Lorraine—Joan of Arc's emblem—which DeGaulle adopted for the Free French movement.

To understand the subject, the student needed to understand that personal relationships underlie political relationships. Therefore, he would need to read historical and psychological materials about the interactions of Roosevelt, Churchill and DeGaulle. To understand political science, he needed to learn history, psychology and so on.

Academic Eclecticism

Despite what specialists might think of other fields, knowing something about them is helpful. Of course, historians use their stuff in their way and psychologists in theirs. But does that mean political scientists cannot use them too, whenever they understand them and find them relevant to their pursuits? Is there a law against academic eclecticism?

Renato Baserga, the chair of pathology at the medical school of Tem-ple University in the 1970s, wrote: "I started out as a pathologist doing classical morphology. Then I studied nuclear physics so I could better understand radiation, autoradiography and problems of that kind. I studied mathematics to understand patterns of cell growth. After these avenues were exhausted in the sense [that] they were not

giving me any more information, I switched to biochemistry. Right now I am even doing some immunology because some of the problems in which we are interested require immunological techniques. There is an advantage in many different disciplines. My medical background has given me the perspective on how to pick a problem. A more rigorous scientific training has given me the tools to try to solve the problem."

Like Baserga, the best medical professors do not consider their specialties and subspecialties to be sacredly separate. They stress interrelationships. They teach that people are whole beings, not limbs and livers, eyes and ears, or heads and hands. And their best pupils—the ones who go on to become the best doctors—remember this.

Somehow, those of us who teach, and those of us who study, political science must take a similar inter-disciplinary approach. Otherwise, the public, the press and the political class will relegate us all to an irrelevance that we would well deserve. *MR*

NOTES

1.Renato Baserga and David T. Denhordt, eds., *Anti-Sense Strategies* (New York: New York Academy of Sciences, 1992).

Edward Bernard Glick is Professor Emeritus of Political Science at Temple University. He received a B.A. from Brooklyn College of the City University of New York and an M.A. and Ph.D. from the University of Florida. Among his books are Soldiers, Scholars, and Society: The Social Impact of the American Military (Pacific Palisades, CA: Goodyear Publishing, 1971); Peaceful Conflict: The Nonmilitary Uses of the Military (Harrisburg, PA: Stackpole Books, 1967); and Between Israel and Death (Harrisburg, PA: Stackpole Books, 1974).

US Army Europe: Deployment Training and Certification

by Colonel Robert J. Fulcher Jr., US Army

Military convoys no longer grind their way to or from the Grafen-woehr training area in Germany. Guns no longer relentlessly pound Grafenwoehr impact areas 24 hours a day. Social, political, economic and environmental factors have eliminated yearly REFORGER exercises. The US Army is now largely based in the Continental United States (CONUS). However, as the Army's forwarddeployed component, US Army Europe (USAREUR) is ideally suited to support the National Command Authority's strategy of shaping and engagement.

USAREUR has become an innovator in the processes necessary to prepare a force for military operations other than war (MOOTW). Nowhere is that innovation as apparent as the training plan used to prepare forces for duty in the former Yugoslav Republic of Macedonia and the NATO-led mission in Bosnia. USAREUR/7th Army's (7A's) success in preparing forces for MOOTW missions results from the application of a simple, yet effective, sixstep model adopted by followon forces in CONUS.

Step 1. Training the force to fill mission essential task list (METL) proficiency. USAREUR/7A calls

this step "training the delta," and it does not relate directly to an impending MOOTW mission. The intent is to bring MOOTW-mission units to full METL proficiency in their conventional mission skills.

The obvious question is why train a unit to a high state of readiness in skills not directly related to the upcoming mission? The answer is simple. There is no guarantee that tasked units will not be pulled from their MOOTW mission to respond to other, higher priority missions that would require proficiency in the skills normally ascribed to the units. The units might also have to transition to conventional military operations within the theater of employment. The time to pull units into neutral areas or the resources necessary to train them might not exist. For these reasons each unit must be capable of fulfilling its habitual assigned role. Obviously this step depends heavily on the most scarce resource in Army operations—time.

Step 2. Form the team. MOOTW missions require a highly tailored team designed to be effective given the mission's unique requirements. The team USAREUR/7A formed to provide a possible response force in Zaire was different from the force sent to the Balkans as part of the NATO-led peacekeeping force.

USAREUR/7A's team will often be a joint team and most certainly will have a combined component. Such a team will most likely comprise a mix of active and reserve forces, and it will be unique in its mix of mission and support personnel. Bringing the team together early in the process helps ensure mission success.

- **Step 3. Assess mission-training requirements.** To provide structure to the assessment, USAREUR/7A divides the assessment into three levels: individual skills, collective or unit skills and leader skills. Within the individual and collective categories, USAREUR/7A has further divided the analysis into general skills associated with the individual or unit and theater-specific skills unique to the mission or environment. The assessment is published in the training annex of the theater campaign plan.
- **Step 4. Training tasks identified in the assessment**. Standards must first be developed. This is where the expertise found at the 7A's Training Command's Combat Maneuver Training Center (CMTC) was employed with great success. The observer-controller teams assigned to CMTC were ideally suited to develop and maintain the programs of instruction necessary to ensure standardization.

To be effective, the first component of training must be leader training. Leader training is a full orientation to the mission and environment, gives key command and staff members indepth knowledge of the mission and allows leaders to focus on followon training. People intimately aware of mission requirements and the environment conduct leader training in seminar format.

The first leaders' seminar was conducted at the Grafenwoehr training area by USAREUR/7A staff. General Sir Michael Rose's experience leading the Canadian peacekeeping mission provided the necessary focus to leaders of the first USAREUR deploying forces. USAREUR/7A using current Task Force EAGLE staff conducted subsequent seminars.

Leaders' seminar. The leaders' sem-inar provides a great opportunity to combine leaders, a scenario and com-puter simulations. The master events list team creates a unique environment for leaders to implement training doctrine on the battlefield without using major training resources.

This capstone exercise provides the training required for units that are getting ready to deploy. In the past, the leaders' seminar has been an invaluable tool for improving the overall readiness for deployment to any contingency around the world. This seminar also polishes existing skills and enhances leader

development at higher collective levels through competitive, force-on-force, METL-specific and high-intensity operations.

Individual replacement training (IRT). IRT is designed to train USAREUR/7A military and civilian individual replacements deploying for duty in Hungary, Croatia or Bosnia in support of Operation *Joint Forge*. Department of Defense (DOD) Level 1, category 2, AntiTerrorism/Force Protection (AT/FP) training and the area of operations brief are prerequisites for deployment.

The CMTC in Hohenfels, Germany, was solely responsible for training individual replacements in CONUS and USAREUR/7A. As CMTC resumed its doctrinal mission of training US and allied units in maneuver operations, a program had to be developed to give units more responsibility for IRT.

On 1 July 1998, a new IRT program replaced the old "all-inclusive" 3-day program. The new program consists of two phases. Phase I is conducted at the individual's unit. The unit commander develops a training plan using a training support package (TSP) developed by CMTC and the 7th Air Training Command (ATC). The TSP consists of video instruction shot by CMTC and available at local training and audiovisual support centers and text material available for download from the 7th ATC. Phase II consists of situational training exercise (STX) lanes where personnel can employ the skills they have learned.

The training an individual receives for deployment depends on his duty status and where he is going in support of Operation *Joint Forge*. All personnel must receive DOD AT/FP training within 6 months of movement downrange. Personnel visiting Operation *Joint Forge* as authorized visitors in a temporary duty status do not require further training. Personnel deploying to temporary change of station locations outside of the MultiNational Division footprint in Bosnia train on only the core tasks in Phase I. Personnel deploying to Bosnia train on all tasks in the TSP, then conduct oneday STX lanes.

The STX lanes are conducted by the individual's major support command or, as an alternate, by the CMTC in Hohenfels. The STX lane uses scenarios and role playing that allow individuals to apply what they have learned in Phase I to situations such as reacting to a minefield, reacting to direct and indirect fire, running a checkpoint and so on.

The new IRT program ensures individuals are prepared for the risks that might arise during deployment with Operation *Joint Forge* and gives commanders more control over their training and the release resources needed for CMTC to conduct its doctrinal mission.

Unit training. Based on the in-formation provided in the leaders' seminar, unit commanders design and implement their unit-training programs. This training is mission-focused and fully prepares the unit to accomplish its MOOTW missions. This training is conducted at home station to minimize personnel tempo. The one element missing after a unit completes this portion of training is bringing the leaders together to ensure the entire team is synchronized and mission-ready.

Mission-rehearsal exercise (MRE). The MRE—the capstone training event—completes the collective-training strategy for contingency operations. Units conduct MREs after completing general and theater-specific training. An MRE methodology is to determine the ground truth, identify staff focus, review sources, finalize story lines and develop consensus and validate story lines with the division. Senior-leader focus is on information briefs by subject matter experts, individual education, individual practical exercises and to train through integration on STX lanes and in the FTX.

Another key to an MRE is the joint air attack team (JAAT). A JAAT's objectives include synchronizing close air support, artillery and attack helicopter fires; validating the ability to plan, coordinate and deliver fires in a peace-enforcement environment; generating, disseminating and rehearsing fire support products and procedures; minimizing tactical risks through force protection measures and certifying at least nine air mission commanders.¹

Step 5. Determine where to train. The necessary time does not always exist to train to the level needed or desired by commanders. This shortfall is driving another paradigm shift. We are familiar with the concept of reception, staging, onward movement and integration (RSOI), which assumed that a trained force would enter the RSOI pipeline for employment. USAREUR/7A's experience highlights the need for considering a "T" (trained) component in the RSOI process. Sometimes the optimum location for training is not at home station and the best time is before deployment. Reserve Components are accustomed to reception, staging, then training at their mobilization stations. This process is migrating to the Active Component as well.

Step 6. Develop a reintegration plan. Previous redeployments from mission placed full responsibility on each unit commander to develop a reintegration plan. While most commanders met the objectives of a swift reintegration, the planning duplicated work done by predecessors. To provide a structure to the reintegration plan, USAREUR/7A developed a measured, methodical and progressive 270day reintegration program. This program includes sufficient time to reintegrate soldiers into individual, unit, collective, staff and leader training programs and ensures soldiers receive time to rebuild their personal lives as well. The plan also minimizes theater disruption by seamlessly integrating the returning unit into ongoing theater training. **MR**

NOTES

1. US Department of the Army Field Manual 1-112, *Attack Helicopter Operations* (Washington, DC: US Government Printing Office, 02 April 1997).

Colonel Robert J. Fulcher Jr., US Army, is currently Chief of Staff of the 7th Army Training Command. He received a B.S. from Florida A&M University and is a graduate of the Command and General Staff College and the Army War College. He has served in a variety of command and staff positions in the Continental United States, Korea, Germany and Saudi Arabia.

In Search of NATO: The Regional Training Center: Bucharest

by Colonel Septimiu N. Caceu, Romanian Army and Lieutenant Colonel Robert J. Knight, British Army

Following its unsuccessful bid to join NATO in 1997, Romania asked the British government to help the Min-istry of National Defence (MOND) disseminate NATO doctrine and procedures within the Romanian Army. The result was the establishment of the Bucharest Regional Training Centre (RTC).

The RTC is based within the Higher Military Academy in Buch-arest and is directly under the command

and control of the Romanian Curriculum Ladecizia Scolii. Since September 1997, many officers have attended the RTC. According to General Wesley Clark, the RTC has been a "most successful and courageous project."

The United Kingdom's (UK's) assistance is part of the British Defence Diplomacy Initiative's Outreach Programme. Having conducted preparatory work in England, a three-man British Army implementation team deployed to Bucharest on 25 August 1997 and joined a Romanian team led by Lieutenant Colonel Septimiu Caceu, the RTC's future chief. The RTC's overarching aim was to encourage a more flexible ethos and approach in the Romanian officer corps.

The RTC was soon a reality. Classrooms, administrative offices and the central lecture theater were allocated, and the information technology and instructional equipment, purchased locally or funded by the British Ministry of Defence, was in place. Having identified course requirements, developed a suitable program and produced the detailed course content of lectures, presentations, discussion topics and exercises, three 4-week courses were run between September and December.

The UK implementation team initially conducted the courses, but by the third course the Romanian staff had assumed total responsibility for both instruction and administration. After the UK implementation team returned home, a permanent British liaison officer remained to provide:

- 1Advice and assistance to the RTC Romanian chief.
- Advice on course content, conduct and development.
- Liaison with UK agencies and organizations on the RTC's behalf.

The Romanian MOND placed considerable importance and priority on the RTC's success. The facilities are excellent and the staff, trained in the UK and the United States, are of extremely high quality and totally committed. The students, many of whom have already taken part in NATO exercises, peacekeeping missions under United Nations (UN) mandates or attended courses overseas, are highly motivated, inquisitive and determined to acquire the knowledge and skills needed to work in a NATO environment.

At the RTC, English is the language of instruction, and all students must have attained English Level 3 prior to selection. At the RTC, they must also attend a 2-week English refresher course, concentrating on military terminology and oral briefing skills. Although the course is Army-oriented, the intent has always been to develop other single-service and joint courses once the initial course becomes firmly established and proven.

Vacancies on all courses are offered to other countries in the region. Romanian General Constantin Deg-eratu notified all other Central and Eastern European countries speci-fically to publicize the course and promote its value and success.

The Army Brigade Course

The Army Brigade Course's aim is to train selected officers in the UK approach to command, staff, operational and logistic procedures up to brigade level. Because this initiative is bilateral, it uses UK doctrine, principles and staff procedures as the basis for course content. This allows the course to be based on an existing UK course at the Army Junior Division of the Joint Services Command and Staff College.

The Army Brigade Course consists of three classes of eight students. There are five courses per year. Up

to 25 percent of the vacancies, approximately six in each course, are filled with students from outside Romania. Each course is six weeks long (eight weeks including language training). The longer course time allows the inclusion of material that had to be omitted from the original syllabus. Course content includes the following subjects:

- Doctrine.
- Command and staff procedures.
- Estimate/the decision-making process.
- Combat service support.
- Operations.
- Operations other than war.

The course focuses on general principles and procedures. It does not include specialized details relevant to individual Army branches.

Standard instructional methods used include:

- Preparatory reading. (Adequate time must be allocated as this too is all in English!)
- Central presentations.
- Syndicate (class) discussions.
- Practical exercises, if applicable.

Class discussions are considered to be a critical element in the learning process. By having a suitable mix of students in relation to rank, arm and appointment—current as well as past—in each class, students can share experiences, ideas and opinions in relation to the subject under discussion. Therefore, individuals will be better able to understand and appreciate the capabilities and limitations of the other elements of the Romanian Army, and better understanding will improve the Army's overall effectiveness during combined arms operations. The total course content includes:

- Central presentations: 20 percent.
- Syndicate (class) discussions: 32 percent.
- Practical exercises: 48 percent.

The significant percentage in favor of practical exercises reflects the need for students to practice newly acquired knowledge and skills. This process has been particularly successful and is fully appreciated by students as well as the staff.

Future Development

Based on the Army Brigade Course's success, the next stage in RTC's development has begun. The attendance of regional officers greatly enhances the RTC, making it truly regional and improving the Romanian officer corps' education and training.

The introduction of additional courses has also begun with consideration given to developing single-service courses for the Navy and Air Force. Currently, the priority is setting up a Joint Service Course, with emphasis on multinational operations. This will allow Romania to further develop its ability to deploy forces abroad in support of either UN or Partnership for Peace activities.

As of 1999, work was ongoing to identify another UK implementation team. Some members of the Joint

Directing Staff had arrived, and others were to have arrived by September. The support staff was in place and working alongside those of the Army Brigade Course. The RTC was also tasked with providing short courses to meet specific demands.

Further developments are in many ways inextricably linked but vary in terms of the timeframe for implementation and complexity. The first is that of the wider dissemination of NATO doctrine and procedures. To a degree this is being done. Officers who have graduated will return to the field armed with newly acquired knowledge and will implement what they have learned.

There is also demand for the RTC staff to visit units and formations around the country to present specific subjects of value to a wider audience. In addition, General Dumitru Cioflina intends to include an additional element within the 2-year syllabus of the Higher Military Studies Academy's Command and Staff Course based on what RTC teaches.

In the medium to long term, because the brigade course and the planned joint course are currently outside the present structure, career courses for Romanian officers will have to be reevaluated. While their structure is acceptable now, it might not be so in the future.

To date, the RTC has been an undoubted success; plans are now well advanced for its expansion. At completion, it will be truly regional. The RTC is trying to change an ethos and approach that has underpinned Romanian military thinking for the last 45 years. In this respect, staff procedures and how they are taught are merely tools to achieve that purpose. There is tremendous enthusiasm for this project to succeed, not only from those directly involved in running the RTC and the MOND but, more important, from the students. The RTC is a small but important cata-lyst for change within Romania's Armed Forces and shows exciting potential for the future. *MR*

Colonel Septimiu N. Caceu, Romanian Army, is Chief of the Regional Training Centre. He is a graduate of the Higher Military Studies Academy and has served in a variety of command and staff positions in Romania.

Lieutenant Colonel Robert J. Knight, MBE, British Army, is currently assigned to the Romanian Ministry of National Defence at the Regional Training Centre, Bucharest. He received a B.S.C. from University College of Wales and is a graduate of the Royal Military Academy and the Joint Services Defence College. He has served in a variety of command and staff positions in England, the Falkland Islands, Ireland and Romania.

Considering Writing for Military Review?

If you are interested in submitting an article, please follow these guidelines:

- Send a double-spaced, typewritten manuscript with your name and title at the top of page one. Also include an IBM-compatible electronic version on a 3.5-inch disk in MS Word or WordPerfect format.
- Typical articles run between 3,000 and 3,500 words or about 15-18 double-spaced pages.

• Please use endnotes rather than footnotes for documentation and ensure there are no embedded notes or figures within the document.

Send submissions to *Military Review*, 294 Grant Ave., Bldg 77, Fort Leaven-worth, KS 6602-1254, or call (913) 684-9327 for more information.

Almanac

The Origins of freie Operationen

by Major General Dieter Brand, German Army, Retired

In 1996, the Germans introduced a term to be used at the operational level of war—*freie Operationen* (loosely translated as "free operations"). However, the term was not clearly defined. Only some characteristics were mentioned, such as the use of space, the main effort, the estimate of the culminating point of the enemy's operation, deep operations and indirect approach. Although the term *freie Operationen* is generally not new in traditional German military thinking, it is, nevertheless, almost a novelty for today's German Army.

During the Cold War, when the highest concentration of nuclear and conventional forces on both parts of German soil occurred, senior German commanders were convinced that the basic *freie Operationen* concept could not help solve the problems of fighting within the cohesive forward defense along the inner German border. The concept seemed to be inapplicable, and neither the elements nor the term were taught to German general staff officers and, therefore, were almost forgotten.

Today, NATO allies are asking what the Germans mean by *freie Operationen*. The term is difficult to explain, because it cannot be directly translated into English. However, a translation such as "free operations" makes little sense, and the term "maneuver warfare" also does not encompass the entire meaning.

This same problem occurs with other typically German military terms such as *Auftragstaktik*, which is not fully translated by the words "mission-type orders." *Innere Fueh-rung* cannot be translated at all. The problem is that these German terms comprise not only a specific meaning, but exemplify an entire philosophy of command and control and leadership. Let us, therefore, attempt to answer the question: If the elements of *freie Operationen* are essentially not new, what then is the background in German military history that could lead us to an understanding of the term? What are the origins of *freie Operationen*?

Even a superficial exploration of German military history literature, reveals that *freie Operationen* was once common terminology for officers educated in the operational art. They also spoke of *freies Operieren*, but the term is not found in early official doctrinal papers. The terms appeared in neither Field Marshal Helmuth Karl von Moltke's 1869 "Directives for Higher Commanders," the 1910-era "Characteristics of Command and Control on the Higher Level" nor the later field manuals—"*Truppenfuehrung*" of the *Reichswehr* and *Wehrmacht*.

The term *freie Operationen* was not used officially, but it was commonly used to characterize specific elements of operations and represented a philosophy of operations. Since military personnel seemed to have a good understanding of the term, it was not considered necessary to provide a comprehensive definition. However, this assumption risked having everyone understand it in slightly different ways.

One reason why it is so difficult to define the term is that some German military operations displayed all of the characteristics of *freie Opera-tionen* but were not called such by their initiators. For instance, the German campaign against France in May 1940 is now considered by Germans to be the example of *freie*

Operationen. Chief of Staff of the Army Group Erich von Manstein developed the basic ideas for that campaign, but he did not use the term in context with his concept of operations. Nevertheless, in his memoirs titled *Lost Victories*, he enumerates all of the characteristics of *freie Operationen* more or less in a selfexplanatory manner.¹ This underlines the fact that the term has more of a general nature than a precise definition.

These circumstances might also explain why there is no term in German military literature that contrasts with *freie Operationen*. Would they be called "hampered" operations? If asking a *Reichswehr* or *Wehrmacht* general staff officer, what is the contradiction to *freie Operationen*, he would surely mention *frontale Oper-ationen* (frontal operations) with the aim of attrition, but not because frontal is the opposite of free, which obviously it is not, but more because of the philosophy of *freie Operationen*.

Moltke

Up to the beginning of World War I, German general staff officers saw the operational level of war exclusively in the framework of *freie Operationen*, which always meant the "unrestricted use of space." The chiefs of the general staff, first Moltke and later Count Alfred von Schlieffen educated and impressed entire generations of general staff officers with this concept. However, understanding Moltke's use of the term *Operationen* requires understanding his view of the strategic conditions of a future war and what consequences he saw for the operational level of war. This understanding is necessary because philosophies of operational art are always bound to specific conditions of the time. Through time the character of *Operationen* is subject to development and change as well.

For Moltke there was no question that because of the confrontation of fundamental interests of the main powers in Europe—France, Great Britain, Russia, Austria and Germany—war in Europe was to be expected. Because of the demographic development as well as the effects of the industrial revolution, these powers would field large conscript armies.

In Moltke's assessment, the German *Reich*, precariously situated in central Europe and endangered should a two-front war occur, could never sustain such a large force over an extended period with manpower or logistics. For generations of German general staff officers this was the strategic framework for operational-level thought. They concluded that since avoiding war was not the task of the military, it was crucial to fight decisively, immediately take the initiative and dictate to the enemy *das Gesetz des Handelns*—the rules for action.

In Moltke's understanding, this challenge meant planning and controlling the movement of large army formations—corps and armies (forces)—in the area of operation (space) to concentrate all available forces at the day of the battle (time) out of different directions for one decisive battle, which should result in a quick decision. This new idea—the heart of *Operationen*—involved concentrating forces by maneuvering troops from different points against the enemy's front line and deep flanks just in time during battle.

This encirclement by *freies Oper-ieren* before the battle was the essence of Moltke's thinking. Only *freies Operieren* could produce a swift decision necessary in the strategic context. Therefore, Moltke never considered protracted frontal attacks to attrit the enemy.

According to Moltke, the battle belonged to the tactical level of war. This leads to another fundamental aspect of Moltke's thinking. Because the battle should lead to a clear decision, it was essential to bring to

bear all forces available even by taking great risks in other areas. "You can never be strong enough for the decision, and therefore the last battalion which can be made available should be concentrated," said Moltke.² Therefore, establishing a clear main effort where a decision is sought is a fundamental of traditional German military doctrine. To summarize: the coordination of forces in time and space oriented toward the common objective is the essence of command and control on the operational level. For Moltke, it was the essence of *freie Operationen*.

A third aspect of *freie Opera-tionen* is Moltke's development of a new type of command and control. He was convinced that large maneuvering units could not be directed by short-span orders. Commanders needed general directives to pursue the common objective using their own initiative. This comprehensive system of control by general directives initiated the so-called *Auftrags-taktik*, which cannot be separated from *freie Operationen* within traditional German understanding.

For Moltke, space was one element of operations that had to be ful-ly used to direct army formations to final battle positions. The availability of space and the right of military commanders to make use of it were not to be questioned. Also, for subordinate commanders, it was essential to use space fully as a precondition of developing their own initiative.

In the traditional operational thinking of German general staff officers, the element of space played a central and decisive role. Chief of the General Staff of the Army of the *Wehrmacht* Colonel-General Ludwig Beck said, "If space is not available or granted—by what reasons so ever—the military strategy then must do without one of the very important parts of its art; that is, the art of operations." That is, if space is not available, then operations are not possible. For Beck, the operational art, in accordance with Moltke's understanding, meant nothing else but the art of *freie Operationen*.

Although the unrestricted use of space was the first and decisive criteria of *freies Operieren*, Moltke and his successors were not dead-set on it. Instead, they opted for a pragmatic response to the problems in fielding mass armies—problems referred to in "Moltke's War Lessons."⁴

Moltke especially addresses the problems of sustaining large army formations and discusses the alternatives of concentrating all formations before the battle or the concentration just in time on the battlefield. He says, "[F]irst of all, all armies want to live, they need to eat and drink, they need rest as well as freedom for movement. Hundreds of thousands of people cannot live only out of magazines. . . . Nature itself . . . is opposed to all great accumulation of human beings all in one place. . . . Each accumulation is therefore by nature a calamity. It is justified and necessary if it leads to battle immediately. It is dangerous to divide it again when facing the enemy. And it is impossible to remain in it for a longer time." Then follows the familiar sentence: "Circumstances will develop much more favorably if just at the day of the battle all forces are concentrated toward the battlefield from different directions; that is, if the operation could be controlled in such a way that only a short approach march leads into the flanks and the rear of the enemy at the same time. In this case, strategy will have done its best, and great results must be the consequence."

Moltke had already expressed his views in his 1869 directives, but in his later historical studies he stresses the aspect more precisely and expands his view. In these studies it became clear that for his principle "divided approach, common strike" he not only contemplated the aspect of a quick, decisive battle, he also considered the reasonable logistic arguments evident in the quote: "[E]very concentration of large mass units is a calamity per se." The idea of concentrating large army formations, after

unhampered maneuvering out of different directions just in time against the front and especially the flanks of the enemy, displays the splendor of operational inspiration and yields, to a high degree, the very pragmatic or logistic viewpoints of that day.

Schlieffen

Chief of the General Staff Count Alfred von Schlieffen handed down Moltke's fundamental understanding of operational command and control to generations of general staff officers. However, over time he lost Moltke's pragmatic approach and concentrated more and more on the idea that the attack against the flanks, and particularly the rear, of the enemy was the essential lesson of all military history. Therefore, he was accused of being dogmatic, of rendering undue importance to encirclement operations.

Indeed, in his studies of the Battle of Cannae, Schlieffen concentrated exclusively on the idea of encirclement. He writes, "[The] enemy's front line should not be the objective of the main attack at all. The mass of own forces, as well as own reserves, should not be directed against the enemy's front. Instead, it is essential to hit the flanks of the enemy. These flanks should not be seen only in the utmost ends of the front line but must be seen more in the entire depth of the deployment of enemy forces. The defeat of an enemy will be completed by the attack against his rear."

In Schlieffen's view, Moltke exemplified this idea during the 1866 Battle of Koeniggratz and more so during the 1870 Battle of Sedan. In essence, these battles were similar to the ancient Battle of Cannae. Enemy forces were completely encircled in consequence of free maneuvering through space. Everything else, especially such victories resulting from direct and frontal attacks, were disqualified by Schlieffen as ordinary victories because in them operational art could not completely unfold. In this context, operational art meant *freie Operationen*.

Whatever approach one might take to put these ideas into an overall historical perspective, there is no doubt that Moltke and Schlieffen laid the basic understanding of *freie Operationen*. To them, the term meant maneuvering forces while making full use of space, getting quickly into the depth of the enemy, concentrating formations to attack the enemy's flanks and particularly his rear, thereby enveloping, then destroying enemy forces.

Beck

World War I caused deep frustration for all who adhered to Moltke's and Schlieffen's ideas on the operational level of war. However, one exceptional example proved Moltke's ideas. At the Battle of Tannenberg in East Prussia in August 1914, an outnumbered German force defeated two Russian armies. The battle is a good example of *freies Operieren* in which an outnumbered force used agility to outmaneuver the enemy and win.

However, frustration came soon. In the campaign against France, German forces, following the so-called Schlieffen Plan, were unsuccessful in reaching the enemy's deep flanks. After exhaustive marches and fighting, the operation came to a halt along the Marne River. Both sides established continuous front lines from the English Channel to the Alps. In addition, artillery and machine-guns reached such a dominance on the battlefield that any further movement was denied. Moltke and Schlieffen never anticipated an area of operation completely filled by the mass armies of both sides, making it impossible to envelop the enemy's front line. Their concept of making full use of space to envelop the enemy no

longer seemed applicable.

Beck, Chief of the General Staff of the Army of the *Wehrmacht* until 1938, mentioned in his reflections on World War I that the mass and fire power of modern armies posed a new challenge at the operational level of war—how to deal with continuous and combatready front lines. "Where opposing forces are deployed [within a] short distance of one another, so [that] they fill the entire area of operation, there will be no space for *freie*, quick and bold operations, and the battle must begin just from the basic line without having the possibility for *freies Operieren*."

In such a situation, strategy must do without one of its most important elements—operational art. Obviously Beck remains squarely in the tradition of Moltke's thinking: when space is not available, operational art cannot be brought to bear, particularly not to its highest standard of *freie Operationen*.

World War I commanders, at least in the Western Theater, did not find a solution to this new challenge. They succumbed to the fallacy of attacking repeatedly against strong enemy positions while hoping that enemy losses would be greater than their own, such as at Verdun. This was nothing but attrition, which Moltke had rejected as wasteful and slow and Schlieffen had qualified as ordinary. Indeed Verdun is not only a contradiction but a perversion of operational art.

Seeckt

French army commanders were convinced that the dominance of fire would always favor the defender and, therefore, all thinking and training should concentrate on defense. After analyzing the events of World War I, the German military establishment under Colonel-General Hans von Seeckt's command, drew completely different conclusions.

Seeckt suggested that in a future war the German *Reich* would again be in the strategic situation of being outnumbered and unable to sustain a long-lasting war. Therefore, he believed that a small, highly professional army supported by an air force should immediately begin offensive operations, attempt to maneuver into the flanks of enemy formation, interfere with their concept of operation and avoid at all costs establishing continuous front lines.¹⁰

Nevertheless, if *freies Operieren* was not possible because of wide-stretched enemy positions, then the Germans would have to try another way to achieve their mission because a battle from the basic line always leads to a battle of attrition. German commanders wanted to avoid this quagmire at whatever cost. *Freies Operieren* could make full use of space and was the only chance to take the initiative and dictate events on the battlefield to ensure a quick, decisive result.

The solution was to employ a breakthrough operation by concentrating forces for a decisive action with a clear main effort. Enemy forces could be taken by surprise. While accepting risks in other sectors of the front, German forces could blow a hole through the enemy's front line—regardless of the danger to their own flanks—and immediately attack into the enemy's depth to interrupt lines of communication, then encircle and destroy enemy forces. Colonel-General Herman Hoth said that performing this quick advance into the enemy's depth is "a sin against the fundamental idea of the overall concept of operations to get involved by encounters." ¹¹

We now recognize the decisive development inherent in the philosophy of *freie Operationen*. Moltke and Schlieffen saw the sequence of events as deployment, maneuvering in space to outflank the enemy, and encirclement. The new sequence would be deployment, breakthrough battle, quick advance into the depth

making full use of space and taking high risks, interrupt lines of communication, and encirclement.

Moltke saw *freies Operieren* coming before the decisive battle. For Seeckt, it would occur after the breakthrough. This new sequence was not mandatory; it only widened the spectrum of possible actions. Armored combat troops, in close co-operation with the air force, applied these new ideas during the Ger-man's May 1940 campaign in France.

Manstein

Moltke and Schlieffen understood *freies Operieren* only in the sense of strategic offense taking the initiative on the operational level to achieve quick results. Since the Battle of Tan-nenberg, and especially since the second phase of World War II, German thinking has concentrated on *freies Operieren* in strategic defense when the *enemy* initiates the action. In such cases, all elements of *freies Operieren* participate in so-called counter-stroke operations. By using space as a lure and giving it up to the enemy, defenders draw him into the depth and overstretch his lines of communication. At the same time, forces would take greater risks in other sectors of the front. When enemy forces reached the culmination point, German forces would seize the initiative and launch a counterstroke.

The decisive aspect is that coun-terstroke forces should in no case be directed against the bulk of enemy formations. They should try to avoid encounters; maneuver into the depth of the enemy, while taking greater risks for the flanks of their own advancing forces; cut off the enemy's lines of communication; then encircle and destroy him. All elements of *freies Operieren* would come to bear on the enemy force.

Schlieffen taught that the mass of enemy forces would not be the main objective. Hoth believed it a sin against the basic idea of the operation to get involved in encounters. From Moltke's viewpoint, the decisive point was to quickly reach the deep flanks and the rear of the enemy. Some German field commanders called this type of operation "counter-pursuit." The most famous example is Manstein's counterstroke operation in February 1943 south of Charkow. As a consequence of the disaster of Stalingrad, two German army groups were in danger of being cut off by a bold, deep offensive operation conducted by Soviet forces. The Germans were outnumbered, but Manstein took the initiative and turned the overall situation to his advantage.

These events, especially those at the Eastern Front, enforced a questionable conviction among German field commanders and general staff officers that, given the possibility for *freies Operieren*, force ratio did not play a decisive role. Executing the highly developed operational art with motivated troops led by highly qualified leaders, the force ratio could nearly be neglected. But again, this questionable argument is valid only under specific conditions, when the quality of the enemy is known.

The Future of freie Operationen

Can *freie Operationen* philosophy be helpful in solving future problems? In the past, *freie Operationen* focused exclusively on ground forces maneuvering large ground formations making full use of space. However, there is no mention that air superiority must set the conditions for ground forces to concentrate and maneuver. Also, *freie Operationen* concepts do not include joint forces or anticipate the complexity of modern operations.

The aim of this article is not to show how *freies Operieren* elements can help solve future problems. Its aim is simply to identify the origins of *freie Operationen*. But the idea of *freie Operationen* should not

remain mothballed. On the contrary: we must realize that the last example of an encirclement operation making full use of space occurred just recently.

The latest "Cannae" in military history was Operation *Desert Storm*, about which US General Norman Schwarzkopf has said: "The textbook way to defeat such a force; that is, the entrenched infantry and the mobile operational reserves in the depth of the Iraqi positions, would have been to hold it in place with frontal attack while sending an even bigger army to outflank it, envelop it and crush it against the sea." And that is exactly what he did. *MR*

NOTES

- 1. Erich von Manstein, Lost Victories: War Memories of Hitler's Most Brilliant General (Bonn: Athenaum-Verlag, 1955), 6.
- 2. Helmuth von Moltke, War Lessons: The Battle (Berlin: Mittler and Sohn, 1911), 6.
- 3. Ludwick Beck, Studies: Germany in an Upcoming War (Stuttgart: General Dr. Speidel, 1955), 64.
- 4. Moltke, War Lessons: The Tactical Preparation of the Battle (Berlin: Mittler and Sohn, 1911), 102.
- 5. Ibid.
- 6. Ibid.
- 7. Ibid.
- 8. Alfred von Schlieffen, Gathered Writings I, Cannae (Berlin: Mittler and Sohn, 1913), 29.
- 9. Beck, Studies: Strategy (Stuttgart: General Dr. Speidel, 1955), 82.
- 10. Hans von Seeckt, Thoughts of a Soldier: Modern Armies (Berlin: Verlag fur Kulturpolitik, 1929), 94.
- 11. Hermann Hoth, Panzer Operations (Heidelberg: Kurt Vowinckel Verlag, 1956), 24.
- 12. Norman Schwarzkopf, It Doesn't Take a Hero (New York: Bantam Books, 1992), 362.

Major General Dieter Brand, German Army, Retired, has been the German IV Corps Deputy Commander General and the Chief of Staff, Central Army Group, Heidelberg. He is a graduate of the US Army War College. He has also written about freie Operationen for the German magazine Truppenpraxis.

Under the Gun: Training the American Expeditionary Forces, 1917-1918 by Colonel William O. Odom, US Army

Immediately preceding World War II, US national policy sought to avoid entanglement in European affairs. Accordingly, military strategy focused on coastal defenses, patrolling the Western Hemisphere and protecting the United States' few overseas possessions. In early 1917, the situation changed

dramatically with the adoption of a hard-line pol-icy toward German submarine attacks. The declaration of war on Germany found the United States at a greater disadvantage than at any time in its history, despite passage of the National Defense Act of 1916, the birth of a popular preparedness movement and the conduct of military operations on the Mexican border.¹

The successful mobilization of US national resources decisively influenced the war's outcome. The United States's awesome war-making potential cast a foreboding shadow on the *Reich*'s future. Ger-many's strategic underestimation of the quantity and quality of US fighting forces prominently figured in its defeat, despite the fact that US forces arrived in France with little training beyond physical con-ditioning and drill.

State of Preparedness

In April 1917, the US Army's abil-ity to influence the war in Europe appeared negligible. The Regular Army consisted of 38 infantry regiments, 17 cavalry regiments, 9 artillery regiments and 3 engineer regiments, most of which were at least one-third undermanned. No divisions existed. The National Guard numbered only 182,000—less than one-half the number that had died in a single day on the Western Front.²

European armies were armed with machineguns and automatic rifles—100 in each regiment. In contrast, the US Army lacked most of the new weapons of trench warfare. Mortars, hand grenades, howitzers, tanks, 37-millimeter guns and gas masks were not in the Army inventory. Infantry regiments manned only four machineguns, the dominant weapon in close combat in Europe. Procuring and testing a new standard machinegun was a low priority. Also, the National Guard mobilization in response to the Mexican border crisis in 1916 had depleted stocks of many individual issue items such as uniforms and helmets.³

Training consisted of drill, some rifle marksmanship, physical conditioning and inspections. Maneuvers involved no more than battalion-size units. The duty day usually ended by noon to escape the afternoon heat. Selected officers studied at the Leavenworth schools and acquired excellent staff skills; many more played cards and rode horses to pass the boring days in an Army garrison. With the exception of Philippine Campaign and Mexican Punitive Expedition veterans, few men had experienced combat. None had seen combat like that on the Western Front.

The General Staff was divided and weak, and its Congressional opponents undercut what effectiveness it had by strictly limiting its numbers. The tiny 19man war-planning staff necessarily focused on the immediate crises in Mexico to the neglect of contingency planning for operations in Europe.⁴

The declaration of war against Germany on 6 April 1917 surprised few. But, US President Woodrow Wilson had refused to prepare openly for war. He naively hoped that US threats would deter the Germans from continuing unrestricted submarine warfare. Consequently, US mobilization began from a standstill.

Mobilization Challenges

Providing personnel presented no problem. After brief debate, Wilson approved conscription and volunteering to meet the manpower requirement. The draft eventually provided 67 percent of the troops.⁵ Training and equipping the rapidly expanding force was not as easy. Initial estimates placed the projected US contribution at one million men; over three times that number were serving by 1918.

General Staff planning only addressed manpower mobilization; its neglect of economic and industrial mobilization planning meant the US could not adequately equip the forces bound for Europe. The fine USmade Browning automatic weapons and Springfield rifles did not arrive in Europe until July 1918. Only 100 of the 2,250 field guns US forces used were USmade.⁶ The Allies provided most of the artillery.

The challenge of quickly training one million men for war was equally demanding. The original goal was to train one-and-one-half million men before they were shipped to France. The General Staff War College Division considered using Regular Army and National Guard officers as cadre for the new recruits and levies. The accelerated need for a US presence altered the plan.⁷

Through intensive training, the Army attempted to compress the one to two years believed necessary to train a soldier into four months. Soldiers drilled, marched, performed calisthenics, attended classes and served on inevitable details for 17 hours a day, 6 days a week.

Stateside training faced numerous obstacles. The large number of nonEnglish-speaking draftees, possibly as high as 18 percent of the total, in many instances limited the quality of training. Equipment shortages of all kinds further hindered preparation. And, at many camps, the harsh winter of 19171918 degraded training. As late as June 1918, some men arrived in France without having fired a rifle.

Officer training, similar to troop training in its emphasis on physical hardening and the development of discipline through drill, marches, school of the soldier and marksmanship, was little better. Officers also trained in scouting, patrolling and tactics, although shortages of training aids and equipment often marred training. Despite such inadequacies, officer training camps provided nearly half of the Army's officers.⁹

The disastrous result of the Nivelle Offensive, led by French General Robert Nivelle, was approximately 120,000 casualties. The offensive brought a cry for the immediate deployment of a US division. The hurried departure of the newly assembled 1st Division meant it would have to be trained in France. Such hasty creation and deployment of divisions became the norm for the remainder of the war. Therefore, few units or individuals completed training before embarking for France.

Pershing on Training

US General John J. Pershing was responsible for leading and training the American Expeditionary Forces (AEF). Wilson and Secretary of War Newton D. Baker gave Pershing nearly limitless authority. Baker told Pershing that he would receive only two orders from him—one to go and one to return. "The decision as to when your command, or any parts of it, is ready for action is confided to you." 10

Pershing typified the general officer in many of the major armies of his day. He was a strict disciplinarian, valiant in combat, a die-hard cavalryman and wedded to the belief that there was nothing new under the sun. He agreed with most Regulars that training a soldier to meet Regular standards required over a year. His approach to training reflected his conservatism.

Pershing noted that the Allies seemed convinced that with the advances of new technology, the principles of war had changed. They were preoccupied with defense. The French, in particular, exclusively emphasized trench warfare. Pershing reasoned that France's past experiences defending against the Germans reinforced their belief in trench warfare. The "resultant psychological effect . . . obscure[d] the principles of open warfare" and committed the combatants to a war of attrition. It was Pershing's opinion

that "the victory could not be won by the costly process of attrition, but must be won by driving the enemy out into the open and engaging him in a war of movement. Instruction in this kind of warfare was based upon individual and group initiative, resourcefulness and tactical judgment, which were also of great advantage in trench warfare. Therefore, we took decided issue with the Allies and, without neglecting thorough preparation for trench fighting, undertook to train mainly for open combat, with the object from the start of vigorously forcing the offensive." ¹¹

After the war, Pershing wrote that the Allied emphasis on trench warfare and neglect of open warfare techniques increased the success of the German breakthroughs in 1918. Even those units that had adopted the defenseindepth, he added, lacked the open warfare skills to exploit its advantages in the counterattack.¹²

Pershing's precise definition of "open combat" is not clear. He did not address the specifics of his ideas beyond insisting on offensive action to break the trench stalemate. It is doubtful that Pershing could have developed a full appreciation for the weapons of modern warfare through previous experience. For him, the enemy army remained the real objective, the principles of war remained unchanged and the infantry remained the principal weapon of war.¹³

Pershing advocated aggressive, offensive, infantry action with heavy reliance on rifle marksmanship and the bayonet. He believed the Allies wrongly subordinated the rifle to the hand grenade, machinegun and indirect fire. All "were valuable weapons for specific purposes but they could not replace the combination of an efficient soldier and his rifle." Personal discipline enhanced a soldier's proficiency with his weapon. Personal discipline, to a Regular like Pershing, began with a firm grounding in military courtesy, customs and bearing. Simply put, a soldier who looked like a Regular might fight like a Regular. The combination of discipline and weapons proficiency was the foundation of the AEF training program.

Training Program and School System

Pershing complained about the inadequate preparation of incoming soldiers throughout the war. In messages to the War Department, he specifically stated the requirements for officers with staff skills. He also repeatedly emphasized the need to train soldiers in rifle marksmanship skills, the school of the soldier and open warfare techniques. He never accepted the War Department's excuses for shipping untrained and improperly trained officers and men. Nor did he understand the War Department's continued emphasis on training for trench warfare in spite of his call for soldiers trained in open warfare techniques.

Pershing's dissatisfaction with stateside training increased as urgent requests for replacements at the front forced him to abbreviate, and in some cases eliminate, local training. In many cases, unskilled officers and men who had never fired a rifle went directly into the line. ¹⁶

The design of the AEF training program was influenced by the military importance of a strong American showing in its first battle, professional concern for the thorough preparation of his force, the aforementioned state of unpreparedness and Pershing's personal conservatism. As early as August 1917 Pershing underlined the criticality of training by separating the Training Section from the Operations and Training Division of the General Staff.

In February 1918, the Training Section became the fifth section of the General Staff—G5. Its sole responsibility was to plan and supervise training. Pershing assigned Colonel Paul B. Malone, assisted by Colonel Harold B. Fiske, to head the new training section. Pershing clearly believed that "the most important question that confronted us in the preparation of our forces of citizen soldiery was training." ¹⁷

The Training Division's plan envisioned a six-division corps composed of four combat divisions, a depot division and a replacement division. The depot division, located at the ports, received new soldiers and provided six weeks of basic individual training before forwarding them to the replacement division. The demand for combat divisions quickly reduced the number of depot divisions from six to two. These two depot divisions, the 41st and 83d, processed all of the AEF replacements. The replacement division trained men of all ranks and forwarded them to combat units as required. 18

The AEF school system consisted of Army and corps schools. Originally organized by General Robert L. Bullard and Colonel James W. McAndrews, the schools provided training centers for individuals and units up to division level, replacement training centers, corps schools for commanders and noncommissioned officers (NCOs), a general staff college, instructor training for the corps schools, officer candidate training, branch skills training and instruction for staff and department specialists.

Ideally, the AEF schools were to provide three months of training to supplement that received stateside. The soldiers were to learn the special skills required in modern warfare—familiarity with new weapons systems, new communications techniques and new staff skills. The Army schools focused on training instructors, expecting graduates to return to units and impart their newly acquired knowledge to the troops through unit training and as instructors in corps schools. The schools graduated 21,330 NCOs and 13,916 officers during the course of the war. Of these soldiers, over 12,000 received commissions through officer training programs. Pershing's willingness to take the best officers out of the line to attend and administer the schools emphasizes their importance in his training scheme.¹⁹

The division training program—the basic unit training course—strove to incorporate the best features of British and French systems. The French emphasized trench warfare almost exclusively. The British emphasized trench warfare, but they also trained to develop confidence in individual fighting prowess through aggressive handtohand combat.²⁰

The division training program consisted of three phases, each lasting approximately 30 days. In the first phase, the division reviewed elementary drill and tactical exercises. French and British instructors conducted training in trench warfare and introduced the troops to trench fighter's tools of war—the gas mask and flamethrower among them. In the second phase, under French control, one battalion per regiment spent 10 days occupying a quiet sector of the front. The last phase consisted of combined arms maneuver exercises with artillery and aircraft in support of infantry. The division then moved to the front. ²¹ Throughout training, the G5 Section strove to balance the French emphasis on defense with US practices of rigid discipline, rifle practice and instruction in open warfare. ²²

AEF Division Training

The 1st Division, the first unit to undergo training in France, was formed from four Regular infantry regiments. Twothirds of the division was composed of new recruits.²³ Even the seasoned soldiers, fresh from duty on the Mexican border, had never seen or heard of the weapons and equipment with which they were to fight.²⁴ That the 1st Division ranked among the best-prepared units underlines the challenge

the AEF commander faced.

The 1st Division's training exemplifies the division program. Within days of debarkation, the division moved to Gondrecourt to begin training. To prepare the troops for trench warfare, training began with "a heavy dose of physical conditioning and drilling." Pershing directed strict personal disciplinary policies, forbidding consumption of strong alcohol and making contraction of venereal disease a courtmartial offense. To many, soldiers of the 1st Division represented the last hope; Pershing wanted to ensure they could live up to every sense of that expectation.

The elite French Chasseurs Alpine, the 47th Division Blue Devils, conducted trench warfare training. The Americans dug a major trench complex in Gondrecourt and smaller systems in each of the local training areas. They trained for eight hours a day, six days a week, to master trench fighting skills from individual through battalion level. The method of instruction consisted of a demonstration of the task by the French followed by a US attempt to imitate them. The infantry learned to construct, occupy, defend and resupply trench systems. Training included use of rifles and hand grenades, airground communications techniques, trench observation devices, pyrotechnic signals, positioning and employment of key weapons and distribution of men. The French introduced the Americans to the 37-millimeter gun, trench mortar and the Chauchat automatic rifle. At Pershing's insistence, training incorporated rifle and bayonet practice. Night exercises, use of imitation gas and the uncomfortable weather conditions heightened training realism.²⁷

Machinegunners, who trained separately at first, received one week of mechanical training and crew drill before advancing to site selection, occupation of a position and dry fire training. They also practiced relief in place, firing final protective fires and selecting alternate and supplementary positions before live firing.²⁸

Artillerymen, trained separately until the third phase, learned all aspects of operation and maintenance of the French 155-millimeter and 75-millimeter guns. By the second week of training, crews fired every morning. In the afternoon, the cadre led critiques of the morning's shooting. Liaison officers and aerial observers attended special classes. In the fourth week, the men conducted fire missions without cadre assistance. Throughout training, the artillery units road marched daily to maintain the condition of the men and horses. After seven weeks, training was complete.²⁹

Support arms received special attention. Engineers constructed field fortifications and emplaced and breached wire obstacles. They also practiced infantry skills. Signalmen trained with French equipment, visiting the front to observe techniques for communication and liaison. Training included codes and ciphers, use of wireless sets, telephone construction and maintenance and switch-board operations.³⁰

French liaison officers supplemented unit staffs at all levels. US staff officers visited French divisions at the front to observe procedures and attended the special French, British and AEF schools. Training support and preparation of practice orders provided additional training.³¹

The 1st Division completed the first phase of training in October. French instructors noted the following US deficiencies: tendency to neglect logistics and liaison, poor coordination of artillery, poorly sited machineguns and bunching up during assaults.³² The same shortcomings resurfaced repeatedly in the battles of 1918.

On 21 October, the first US battalions entered the trenches in the Sommerville sector under the control of

the 18th French Division. In addition to defending the trench, the battalions patrolled and emplaced wire obstacles in "no man's land." While in this "quiet" sector, the Americans tasted first blood, mostly their own. Before the 30 days ended, casualties amounted to 36 killed in action, 36 wounded in action and 11 taken as prisoners of war. The short-term occupation of the trenches brought home the realities of combat—fear, casualties, physical discomfort and boredom.³³

In the third phase of training, the division united for the first time and conducted open warfare maneuvers at the battalion level and above. Combined arms operations—infantry, artillery, signal, engineer and combat trains—received particular attention. Tanks were notably absent. Conducted at night and often in gas masks, the training was demanding and realistic. The exercises primarily focused on providing commanders and staffs with opportunities to maneuver large bodies of troops. One soldier reportedly remarked, "I wish we could get through educating these officers." In January the 1st Division entered the line.

The 42d, 26th and 2d Divisions arrived before the end of the year and began training. These divisions mirrored the 1st Division's high percentage of new recruits.³⁵ However, the training they received differed somewhat from the original program.

As early as fall 1917, Pershing's dissatisfaction with French and British training led to program modifications. Staff observers criticized the failure to emphasize open, mobile warfare in accordance with the commander's desires. However, the Allies could not hide their pessimism. After three years of seemingly insignificant fighting, the exhausted and demoralized trainers could hardly inspire the aggressive offense spirit that Pershing believed was essential to success. "After considerable experience, it was the inevitable conclusion that, except for the details of trench warfare, training under the French or British was of little value." Pershing concluded that Americans needed to take the lead in training.

To this end, Pershing published "General Principles Governing the Training of Units of the American Expeditionary Forces." The principles emphasized the correctness and value of US doctrine and training methods used before the war—the primacy of the offensive, the supreme importance of the rifle and bayonet and the criticality of discipline. Pershing urged the War Department to stress open warfare in stateside training, believing that once in France soldiers could learn trench warfare skills in a relatively short period of time and with greater ease. 38

Although the division training program and AEF schools continued throughout 1918, increased demands for manpower forced the curtailment of much of the training. Circumstances at the front necessitated reducing the threemonth course to four weeks or less.³⁹ Especially significant, abbreviated programs usually eliminated the third phase of training in which the only combined arms maneuvers took place. The MeuseArgonne offensive ended any ambitions for sustaining slow, methodical training. Thereafter, the infinitely faster process of providing replacements to trained divisions took priority over training divisions as a unit. The lack of a welldefined replacement system meant that personnel managers skeletonized incoming divisions to provide needed manpower. By mid-1918, the division training program had all but disappeared. As a result, most US divisions lacked operational and tactical skills.

Training Effectiveness

Victory and defeat do not necessarily measure strategic, operational or tactical effectiveness. There are other ways to measure training effectiveness. For example, an evaluation of a unit's ability to execute tactical doctrine is the fundamental measure of training effectiveness. Whether or not the doctrine is

correct does not matter. Employing the correct doctrine increases the chance of battlefield success and can make troops appear better trained than they actually are.

Conversely, perfect execution of the wrong doctrine can make well trained troops appear worse than they actually are. Ineffective training produces troops who cannot execute tactical doctrine. Adequately trained troops execute doctrine but lack the flexibility and initiative to modify it. The best-trained armies adapt doctrine to meet battlefield realities. By applying these definitions to AEF units' performance, it can be concluded that they were adequately trained. However, although they executed US doctrine, they never displayed the ability to adapt to changes signaled by battlefield experiences.

Individual soldier training supported offensive-minded US doctrine. The spirit of the bayonet pervaded all training and encouraged the soldier to perform bravely, almost recklessly, in the face of battle. The French, British, Australians and Germans commented on US troop bravery, stamina and spirit, but noted the tendency to cluster in the attack. For this they blamed faulty US leadership and training.⁴⁰ American bravado, typically displayed by fresh, optimistic, but inexperienced soldiers, also explains their common tendency to attack machinegun nests frontally.⁴¹ The individual soldier was welltrained for aggressive action.

Although unit training reflected US tactical doctrine, unit performance often did not. However, US divisions performed adequately in the defense. Allied trench defense techniques combined with US offensive spirit proved strong enough to meet the rapidly weakening German attacks. The 1st and 2d Divisions, probably the best US divisions, drew frequent praise from French commanders. In fact, the French Second Army commander remarked that the 2d Division was as efficient as any of his French divisions. And even the Germans expressed surprise at the 2d Division's tenacious fighting ability at Chateau Thierry. The stand of the 38th Infantry, later known as the "Rock of the Marne" Regiment, demonstrated US resolve in the defense. The US emphasis on individual discipline, marksmanship, physical conditioning and aggressiveness produced troops who were wellprepared to defend.

Offensive operations exposed major US weaknesses in training, however. Faulty doctrine is the blame for some problems. The doctrinal neglect of tanks, gas and aircraft led to their neglect in training and, inevitably, to their neglect in combat.⁴⁴ Tanks rarely participated in maneuvers and then only in small numbers.

The French regularly incorporated simulated gas attacks into the 1st Division's initial training. Yet, gas still caused between onefourth and onethird of all combat casualties. Not until November 1918 did US troops begin to display an understanding of chemical warfare.⁴⁵

Also, US doctrine made poor use of artillery and placed little stress on logistics, liaison and communications, all of which French instructors noted while training the 1st Division. In combat, these deficiencies resurfaced time after time. Even as late as the Meuse-Argonne Offensive, US forces tended to outrun logistic support and lose contact with the artillery and adjacent units.⁴⁶ The most experienced divisions had begun to overcome these problems by the fall of 1918. Overall, US units were aggressive, if not welltrained for offensive action.

Had the AEF fought longer, it might have demonstrated a greater capacity to learn from tactical experiences. Indeed, some units, especially the 1st and 2d Divisions, trained when not in the line and strove to correct deficiencies. Some units had begun to modify doctrine to fit battlefield reality. However,

these modifications took place at regimental level and below. The upward transmission of battlefield experience from the trench to the General Headquarters, so successfully exploited in the German Army, did not occur even though Training Section observers recorded and disseminated combat lessons.

US officers' training was rushed and uneven. The few Fort Leavenworth graduates ranked with the best commanders and staff officers in any army, yet they were a glaring exception to the rule. Officer Training Centers in the US and France produced approximately 200,000 young leaders through programs remarkably similar to recruit training. Only one percent of all company commanders had over one year of experience. As Senior leaders assumed that inexperienced, poorlytrained junior officers lacked the initiative and expertise to execute ambitious, highly mobile, decentralized operations. As a result, AEF operations orders required strict adherence to timetables, boundaries and limits of advance. The AEF General Headquarters' tight rein on operations prevented the citizen-officer from demonstrating his capability for bold action.

Conclusions

The political desire to preserve an independent US force, the political-military importance of a strong debut and the US Army's prewar unpreparedness necessitated an extended training program for pioneer divisions. The slow, methodical approach to training ensured the best US showing possible, even if it meant the Allies would have to suffer alone a little longer. The pioneer divisions' superior performances, compared with those of later units, attest to training's benefits. The program appears initially to have served its purpose well.

Pershing's approach to training had its weaknesses, however. The Training Section's detailing of men for instructor duty and to attend courses disrupted unit training and drew the ire of commanders at all levels. For example, just as the 1st Division began regimental training, Pershing ordered nine out of the 12 battalion commanders to attend courses at the Staff College.⁴⁸ Similarly, companies sometimes lost their best NCOs to AEF schools.

Pershing's insistence on withholding US forces until four divisions completed the timeconsuming training program significantly delayed the impact of a US presence in Europe. Despite the Allies' urgent cries for assistance, a US division did not occupy a position on the front line until nine months after war was declared.⁴⁹

Chief of Staff of the Army General Peyton C. March and other officers argued that US divisions could have performed just as well without as much additional training. March concluded that the men serving in Europe were of higher quality than the average peacetime soldier and, "filled with enthusiasm for what they regarded as a righteous cause . . . , threw themselves into the training with a zeal and enthusiasm which produced results in a very short time." ⁵⁰

The delay in using US manpower not only discouraged the desperate Allies, it damaged US soldiers' morale: "The practical effect of Pershing's policy was that large bodies of American troops, whose morale was at the highest point, who had had from four to six months' training, and often more in camps in America, and who expected on arrival in France to be thrown into battle immediately, found the keen edge of their enthusiasm dulled by having to go over again and again drills and training which they had already undergone in America."⁵¹

Pershing also sought to apply the tactical doctrine of the mobile offensive as described in Army

regulations. The doctrine under-emphasized machineguns, artillery and motor transport and totally ignored gas, tanks and aircraft.⁵² Even if US units could execute the doctrine—and they could not—US expertise with rifle and bayonet alone would not have changed the outcome. Stressing open warfare over trench warfare techniques produced a US casualty rate much higher than that of the Allies.

By the summer of 1918, the demand for replacements left skeletal divisions after providing needed manpower. The surprisingly adequate performances of the new soldiers, when compared with veterans, suggests that an expanded replacement training system would have worked earlier. By implementing an effective replacement system, Per-shing could have provided trained soldiers to the veteran divisions while permitting new divisions to complete training.

Ultimately, the division training program and AEF schools successfully prepared the first US divisions for their critical debut in the trenches. The training system also built a base of US expertise on which newly arriving troops could draw during the rest of the war. However, the German offensives in 1918 created an emergency and minimized time available for methodical preparation of divisions for combat. By the time of the MeuseArgonne Offensive, the pressing need for replacements in the committed divisions shifted emphasis from timeconsuming, individual and unit training to onthejob training in the trenches. The training system did not adapt to the changing requirements. As a result, most of the AEF learned more from its combat experience than from the AEF schools or the division training program. *MR*

NOTES

- 1. Russell F. Weigley, History of the United States Army (New York: Macmillan, 1967), 35253.
- 2. Edward Coffman, *The War to End All Wars* (New York: Oxford University Press, 1968), 48; Weigley, 35657.
- 3. Ibid., 32, 38; Weigley, 356.
- 4. Coffman, 1119, 42; Weigley, 353.
- 5. Weigley, 35759.
- 6. Ibid., 36063.
- 7. Ibid., 356.
- 8. Coffman, 6466; Weigley, 374.
- 9. Coffman, 55.
- 10. Weigley, 377, 381.
- 11. John J. Pershing, My Experiences in the World War, 1 (New York: Stokes, 1931), 152.
- 12. Ibid., 355, 368.
- 13. Ibid., 1112; Weigley, 391.

- 14. Ibid.
- 15. Weigley, 375.
- 16. Pershing, 150156, 181, 258, 26465, 37980.
- 17. Ibid., 150; General Headquarters AEF, "Final Report of G5," 30 June 1919, in US Department of the Army, Historical Division, *United States Army in the World War, 19171918*, 17 vols (Washington, DC: Government Printing Office (GPO), 1948), 14:289. Hereafter called "G-5 Final Report."
- 18.G5 Final Report, 29091, 437.
- 19. Coffman, 137; Pershing, 15056; Weigley, 387; Robert L. Bullard, *Personalities and Reminiscences of the War* (Garden City, NY: Doubleday, Page and Company, 1925), 5960; US War Department, *Final Report of Gen. John J. Pershing* (Washington, DC: GPO, 1920), 1315; G5 Final Report, 29091.
- 20. Pershing, 151.
- 21. Coffman, 13839; Pershing, 26465; Weigley, 375.
- 22. Pershing, 194.
- 23. George C. Marshall, in *Memoirs of My Services in the World War, 19171918* (Boston: Houghton Mifflin, 1976), describes the state of discipline of many 1st Division soldiers. He relates an episode in which a French general approached a US sentry in front of Major General William L. Sibert's quarters. The general wanted to examine the soldier's rifle. The sentry, standing with blouse unbuttoned and a watch chain draped between his front pockets, handed the weapon to the general then squatted on the doorsill while it was inspected. Marshall claims to have made an onthespot correction.
- 24. Weigley, 356.
- 25. Coffman, 132, 135.
- 26. Ibid.
- 27. Coffman, 13537; The Society of the First Division, *History of the First Division in the World War 19171919* (Philadelphia: Winston, 1922), 1921. Hereafter called "First Division."
- 28. First Division, 2223.
- 29. Ibid., 26.
- 30. Ibid., 24.
- 31. Ibid., 26.
- 32. Coffman, 13537.
- 33. First Division, 2732.
- 34. Coffman, 141; First Division, 3541.
- 35. Coffman, 151; Weigley, 376.

- 36. Coffman, 138; Pershing, 114; Weigley, 389.
- 37. Pershing. No Publishing information available.
- 38. G-5 Final Report, 30407, 32021.
- 39. G-5 Final Report, 301.
- 40. Coffman, 237, 246, 260.
- 41. Ibid., 253255.
- 42. Pershing, 382.
- 43. Coffman, 22122, 226.
- 44. Ibid., 313.
- 45. Timothy K. Nenninger, "American Military Effectiveness in the First World War," in *Military Effectiveness*, eds. Allan R. Millett and Williamson Murray, 1 (Winchester, MA: Allen and Unwin, 1988), 139.
- 46. Coffman, 305, 338, 344.
- 47. Weigley, 373.
- 48. Coffman, 138; First Division, 35; Marshall, 15.
- 49. Weigley, 37172.
- 50. Peyton C. March, *The Nation at War* (Garden City, NY: Doubleday, Doran and Company, 1932), 25560. March's book appeared the year after Pershing's *My Experiences*. In his book, March responds to Pershing's criticisms of the War Department, defending it (and himself) and counterattacking Pershing's management. The reader must accept March's comments, like Pershing's, in the context of their feud. Other officers, US General Douglas MacArthur, for one, support March's assessment.
- 51. March, 258.
- 52. Nenninger, 134.

Colonel William O. Odom, US Army, is serving currently as a Visiting Fellow with the Center for Strategic and International Studies, Washington, DC. He received a B.A. from Purdue University and an M.A. and a Ph.D. from Ohio State University and is a graduate of the US Army Command and General Staff College. He has served in a variety of command and staff positions. He is the author of the book After the Trenches: The Transformation of U.S. Army Doctrine, 1918-1939 (College Station, TX: Texas A&M University Press, 1999).

Return to Table of Contents

Book Reviews

TO END A WAR, Richard Hol-brooke, Random House, NY, 1998, 145 pages, \$25.95.

Richard Holbrooke will enter history as the "architect of the 1995 Dayton Agreements," which ended the war in former Yugoslavia and helped reconfigure the new state of Bosnia-Herzegovina into Muslim, Croatian and Bosnian-Serbian sections. Holbrooke's book reflects the self-assuredness, and sometimes self-righteousness, of a man who has recently brought an impressive piece of inventive diplomacy to a favorable conclusion.

To End A War resembles a political thriller with an a seemingly happy ending. Holbrooke threatens, appears and rages while dealing with his counterparts and adversaries who do their utmost to frustrate him. Sometimes the jealous Europeans seem to be more in the camp of the adversaries—traditionally the domain of the Balkan leaders—than their counterparts. The irritating, oversensitive French ministry of foreign affairs and the obstinate UN commander lead this phantasmagoria.

Many outside negotiators, both military and civilian, could not stand the Machiavellian intrigues and ever-present obstructionists and ran from the scene after too much opposition and too little result. Holbrooke held out. The main difference, of course, was that Holbrooke did not suffer under many hesitating, divided masters. He could threaten with the big stick of US military power.

Holbrooke was not really satisfied with the results, however. "There will be other Bosnias in our lives," he warned. This became true too swiftly, in Albania and Kosovo, where Holbrooke again worked as a political troubleshooter. But this time he had considerably less success, probably to the malicious pleasure of the politicians and mediators he had heavily criticized previously. The future will eventually reveal the real value of Richard Holbrooke's efforts.

MAJ Tijs van Lieshout Royal Netherlands Army

THE PRINCIPLES OF WAR FOR THE INFORMATION AGE, Robert R. Leonhard, Presidio Press, Novato, CA, 1998, 304 pages, \$29.95.

Robert R. Leonhard's thesis in *The Principles of War for the Information Age* is that current principles of war did not work well in the Industrial Age and certainly will not work in the Information Age. He proposes reexamining the principles of war and provides a conceptual framework to replace the current nine "aphorisms": mass, objective, offensive, surprise, economy of force, maneuver, unity of command, security and simplicity.

Leonhard believes that current principles focus on the tactical level of war, have limited value when considering operational art or military strategy and apply mainly to Napoleonic-era battles. He also believes the current single word list is too simplistic, of limited use and should be replaced by the dialectic or a series of arguments that provide a spectrum of options to consider in making decisions.

Leonhard is not humble or timid. He unabashedly states his hopes that his book will stand the test of time, similar to that of Thucydides' *The History of the Peloponnesian War* (Penguin Classics, New York, 1986, \$12.95). While this is an admirable goal, it could easily be interpreted as misplaced arrogance.



Throughout the book Leonhard openly criticizes senior Army leaders, accusing them of not adapting to the new environment of technology and the revolution in military affairs. The frequent attacks take away from the book's overall professionalism.

Despite these faults, the book provokes deep, healthy thought about the military profession and questions its basic principles. Without necessarily accepting that a revolution in military affairs is underway, most will agree that sensors, computers, communications and information technology will affect dramatically how the Army fights the next war. This assumption makes it critical to revisit the principles of war now. Leonhard methodically exposes what has changed in the conflict environment, logically discusses why the current principles have lost their value, then provides a conceptual framework for a new set of princi-ples. I highly recommend the book.

MAJ John L. Gifford, USA, Fort Leavenworth, Kansas

LEARNING FROM CONFLICT: The U.S. Military in Vietnam, El Salvador and the Drug War, Richard Duncan Downie, Praeger Publishers, West-port, CT, 1998, 291 pages, \$65.00.

In *Learning From Conflict*, a study of counterinsurgency and counterdrug doctrines and their implementation, Richard Duncan Downie bemoans the lack of innovation in the US Army's counterinsurgency doctrine despite repeated unsatisfactory operational results and the relatively rapid developments in counterdrug doctrine.

Downie analyzes Army doctrine as it relates to institutional learning and addresses the requisite internal and external conditions that bring about doctrinal change. To change doctrine, the Army must learn as an institution. Downie describes institutional learning as using "knowledge or understanding gained from experience or study to adjust institutional norms, doctrine and procedures in ways designed to minimize previous gaps in performance and maximize future successes."

Downie uses six analytical dimensions to measure doctrinal change: assumptions, program objectives and strategy, roles and responsibilities, analytical requirements, counterinsurgency force composition and organization, and management structure. These dimensions and Downie's analysis produce comprehensive statistics that identify forces producing doctrinal change within the Army. Downie also describes why, even though experiences provide reasons for change, institutional learning does not always occur.

MAJ Paul E. Snyder, USA, Fort Leavenworth, Kansas

Carolina, Chapel Hill, NC, 1998, 231 pages, \$34.95.

As an ROTC instructor, I taught the Battle of the Cowpens in the Military History class. Before I read *A Devil of a Whipping*, I thought I knew the battle. Lawrence E. Babits, drawing from a variety of sources and using his experiences as a Revolutionary War re-enactor, explains how rates of march provide a foundation for timing the battle's various phases. Babits' use of pension applications as sources of information also is unique. The Pension Acts of 1810, 1818 and 1832 provide a wealth of information about who participated in the battle.

Using some basic assumptions, Babits draws several conclusions, such as the number of militia involved in the battle by state. From pensioners with wounds, he places militia units on the field and defines their participation in various segments of the battle. This method also answers questions about the numbers of troops involved as well as casualty figures.

Babits also details Confederate General Daniel Morgan's actions before and during the battle. Morgan's battle plan took advantage of General Sir Banastre Tarleton's impulsiveness, his own soldiers' strengths, their natural tendency to fire high when

aiming uphill and the rifle's superior range. Morgan took all of this into consideration when he chose his ground. His plan allowed gaps in the battle line through which the militia could pass to reform. At these locations Morgan personally helped rally the militia with exemplary leadership.

The book's organization and maps add to overall understanding of the subject, and the bibliography is extensive. The notes are gems that add color and interest to the telling of the tale. I would warn against skipping them.

MAJ William T. Bohne, USA, Retired, Leavenworth, Kansas

GENERAL MATTHEW B. RIDGWAY: From Progressivism to Reagan-ism, 1895-1993, Jonathan M. Soffer, Praeger Publishers, Westport, CT, 1998, 246 pages, \$59.95.

Jonathan M. Soffer provides a remarkable account of one of the most venerable 20th-century US military leaders—General Matthew B. Ridg-way. This book is not, nor should be considered, a chronicle of Ridgway's famous battles; it focuses on his ideology and politics. Soffer uses Ridgway's battles and military assignments as the vehicle to detail how this decisive, single-minded warrior professed his "corporatist" ideals through two world wars, the Cold War and into President Ronald Reagan's administration.

Soffer examines Ridgway's formative years, his first military assignments in Nicaragua and eventual command of the 82d Airborne Division and the 18th Airborne Corps during World War II. Soffer then focuses on Ridgway, the soldier-diplomat, who despite being a rough and somewhat apolitical officer survived political assignments during President Harry S. Truman's administration, assignment as the theater commander in Korea and involvement in the Reagan administration.

In later years, Ridgway persistently lobbied for a strong military based on an industrial society. Despite years of decreasing military spending and reliance on technology, Ridgway never wavered. He warned against the reliance on technology, believing rather in preparing forces for limited wars.

The book traces the popularity of military corporatist ideology among military leaders and politicians in the mid-20th century. Ridgway thought officers should balance the relations between the social classes to ensure the correct production levels to fight the Cold War. He believed that without societal economic and moral support for the military, the outcome would be forlorn.

Despite Ridgway's persistence, his goals never truly materialized until the Reagan administration. Increases in defense spending and mutual cooperation with industry in the 1980s finally provided the necessary ingredients to build a military the Soviets could not match. More significant, the 1980s brought about a return to corporatism and the ability to fight and win limited wars.

Ridgway's strong command presence and his persistence in training forces for battle resonate today. As the Army pursues the Objective Force, are we again relying too much on technology?

MAJ Sean M. Jenkins, USA, Fort Leavenworth, Kansas

CYBERWAR 2.0: Myths, Mysteries and Reality, Alan D. Campen and Douglas H. Dearth, eds., AFCEA International Press, Fairfax, VA, 1998, 403 pages, \$29.95.

I strongly recommend *Cyberwar* 2.0 to those who desire to broaden their understanding of the rapid societal changes brought about by the Information Age, which adds a new, troubling dimension to war and warfare. The rules of engagement are unknown, and the doctrine, weapons and targets are something of a mystery. However, the technology that is changing society and will create the Interim and Objective Forces (formerly called the Army After Next) leaves us vulnerable to a new threat—cyberwar.

Editors Alan D. Campen and Douglas H. Dearth compile essays from 30 government, industry and academic experts in four countries. The essays describe the Information Age's impact on society, economics, strategy, diplomacy and military affairs and offer a broad view of current debate and thought.

The essays that wrestle with the future strategic landscape should be of particular interest to military officers. Grand geostrategic alliances might be a thing of the past as the nature of wealth creation changes and as superrich sociopolitical entities emerge who need no territory, vast resources or large populations.

The essay "Out-Sourcing Command and Control" examines the US military's increasing reliance on civilian-based information infrastructure. The "contractor brigade" might become a reality. The essays Campen and Dearth present can only provoke fruitful thought and discussion on the future of the military profession.

MAJ William T. Sorrells, USA, Germantown, Tennessee

FIGHTING FOR AMERICAN MANHOOD: How Gender Politics Provoked the Spanish-American and Philippine-American Wars, Kristan L. Hoganson, Yale University Press, New Haven, CT, 1998, 360 pages, \$30.00.

Kristan L. Hoganson's book is an intellectually stimulating, but ultimately unsuccessful, attempt to reinterpret late 19th century US political culture and imperialism. The book's genesis lies in a June 1978 *American Historical Review* roundtable discussion titled "American Imperialism: The Worst Chapter in Almost Any Book." Participants debated why the sudden rise and decline of US imperialism generates such poor treatment in history survey texts. The scholars approached the subject in various ways and enumerated several interpretive approaches.

Hoganson continues this discussion by categorizing the arguments as relating to economic ambitions, annexationist aspirations, strategic concerns, partisan posturing, humanitarian sympathies, psychic crises, Darwinian anxieties and contemporary racial convictions. She enters the dialogue by examining the period's rhetoric through a gendered lens.

Fighting for American Manhood

The sheer number of possible explanations convinces Hoganson that some way must be found to develop them into an understandable whole. She asks, "Why did so many reasons for war converge at once?" The answer could lie in "the cultural roots of the Spanish-American and Philippine-American wars." However, the problem is how to relate "the amorphous stuff of culture to something as concrete as policy decisions." Hoganson's goal is to investigate how "manly policies gave gender beliefs the power to affect political decision-making."

Adding gender to the explanatory picture can help explain why all these reasons converged quickly and simultaneously, but adding gender does not "fundamentally

change our understanding of the conflicts." Hoganson's goal is to do just that—change our understanding of these conflicts. Therefore, drawing on the insights of the field of gender studies, she uses that category as the "basic building block" to understand both the wars and late 19th century American political culture. In this she fails. The book focuses too narrowly on this one aspect.

Using gender per se as an analytic category does not open new interpretive horizons, but only emphasizes the Social Darwinist, militarist, scientific racist, muscular Christian and imperialist threads that run through late 19th century sociopolitical discourse. Her examination of this world view exemplifies what one sees when any culture redefines the world on its own terms, excluding and denigrating that which it does not approve.

Hoganson's conclusions and most of her evidence blunt her main interpretive point. Her nuanced analysis shows that gender is inadequate to support an interpretive framework by itself. It is, however, one of many significant threads running through the historical tapestry that help us understand the period in its own terms and evaluate it in ours. If used properly, gender can be a valuable analytic concept. Historians must remain conceptual opportunists in the effort to understand the meaning of the past and communicate it to a wider audience.

Lewis Bernstein, Combined Arms Center History Office, Fort Leavenworth, Kansas

TARGET BOSNIA: Integrating Information Activities in Peace Operations, Pascale Combelles-Siegel, CCRP Publications Distribution Center, Vienna, VA, 1998, 199 pages, out of print.

As we move from an industrial age into an information age, technology plays a bigger part in mission success. Battles that were once won by ground forces alone can now be influenced and possibly won through the media. This is even truer in peace support operations.

In *Target Bosnia* the author looks at how planning factors for such operations support overall mission success. Pascale Combelles-Siegel's thesis, although not clearly stated, is that information activities, if properly planned and focused, influence the battlefield and are a combat multiplier we cannot neglect.

Combelles-Siegel breaks the book into clear segments to explain information activities and how they integrate into the overall mission. She first looks at the three pillars of information activities—public information, psychological operations and civil-military cooperation information—then at how they are coordinated throughout the command and international organizations. Finally, she assesses the effectiveness of such operations and implications for future operations.

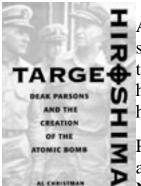
The book is generally easy to read, and the key points and their importance are clearly identified. In the last chapter, Combelles-Siegel summarizes the lessons from the information campaign in Bosnia and reiterates the importance of information activities on the battlefield.

MAJ Kurt J. Pinkerton, USA, Fort Leavenworth, Kansas

TARGET HIROSHIMA, Albert B. Christman, Naval Institute Press, Annapolis, MD, 1998, 305 pages, \$29.95.

In *Target Hiroshima*, Albert B. Christman reveals the true story of an unsung hero—Rear Admiral William "Deak" Parsons—a man of honor, uncommon selfless service and intense commitment to mission. Using factual accounts from key figures and public and private documents, Christman conclusively shows Parsons as the prime force linking civilian scientists, military developers and advanced technologies and high-technology weapons. This synergy preserved US military strength and brought World War II to an end in the Pacific.

Parsons was a zealous advocate of microwave radar for naval gunfire control and air defense. As liaison between the Navy Research Laboratory and the Navy Bureau of Ordnance, he actively championed the limited results of previous tests to secure further testing. But, because of ignorance, bureaucracy or compartmentalization, additional testing was not approved. Years later, Parsons stated that the Navy's two-year delay in pursuing radar technology cost many lives at Pearl Harbor in 1941.



As an experimental officer at Naval Proving Ground, Dahlgren, Virginia, Parsons skillfully led a team of scientists who developed the "smart" fuze—a weapon advance TARGE that was ready in time for prosecuting war. Admiral Arleigh Burke later said that if it had not been for those fuzes, ship losses and casualties in the last half of the war would have been much higher.

> Parsons was also involved with the military-scientific-industrial collaboration for the atomic bomb's production. As assistant director and chief for ordnance at Los Alamos National Laboratory, New Mexico, Parsons spent two years pushing, molding and

motivating a team of scientists, engineers and military personnel to produce, test and deliver the world's

most powerful weapon. Although Colonel Paul Tibbets piloted the *Enola Gay* on the Hiroshima mission, Parsons was the mission's bomb commander. He took the atomic bomb from conception to testing to final delivery.

Parsons did more than any other US military person to field technological advances when they were needed to end the war. He was dedicated to saving US lives in combat and ending war as quickly and decisively as possible through technology. He had a clear grasp of scientific, engineering, ordnance and personnel challenges and was able to overcome them with persistence and team building.

Perhaps the only thing that detracts from this book is its title. "Target Hiroshima" suggests that the book centers on the rationale for targeting the city of Hiroshima or the ethical ramifications of atomic warfare. The book centers on neither. A more appropriate title would have been, "The Deak Parsons Story: Military Innovator of the 20th Century."

MAJ James M. Williams, USA, Helena, Georgia

THE PAST AND FUTURE OF NUCLEAR DETERRENCE, Stephen J. Cimbala, Praeger Publishers, Westport, CT, 1998, 235 pages, \$55.00.

In *The Past and Future of Nuclear Deterrence*, Stephen J. Cimbala compares the diplomatic crisis preceding World War I in August 1914 to the US-Soviet showdown during the Cuban Missile Crisis in October 1962. He weighs the more classical combatant role of naval forces against President John F. Kennedy's use of them to show restrained power.

Cimbala also discusses continuing Russian dependence on nuclear weapons vis-à-vis the START process, proliferation of nuclear weapons among aspiring regional powers, the implications of information warfare on nuclear deterrence and perceptions of limited nuclear war in the Old and New World Orders. With lessons derived from the past and in light of current practices, he argues that the apparent inscrutability of escalation management, not nuclear deterrence as intended, was responsible for the peace among the great powers since 1945.

Cimbala says that World War I offers an example of "miscalculation by European national leaders regard-ing the expected social and political consequences of general war." In contrast, and based on conclusive nuclear research and testing, Cold War US and Soviet command authorities clearly understood the destruction that would result should either choose to cross the nuclear threshold. Therefore, nu-clear deterrence depended on uncertainty, but not on the uncertainty of consequences. The credibility of nuclear deterrence depended on decision-making uncertainty within the strategic commands during crises.

Lacking confidence in their ability to control the dynamics of escalation and avoid crisis-management failure, the United States and the Soviet Union stepped back from the nuclear brink. The uncertainty of potentially flawed decision making and failed nuclear diplomacy kept US and Soviet leaders from accepting too much risk.

Cimbala provides sound research that greatly contributes to ongoing discussions of nuclear deterrence. His work regarding information warfare in the continuing nuclear age warrants further consideration by those who would meld technology and policy into a credible national defense posture.

THE LOST ART OF DECLARING WAR, Brien Hallett, University of Illinois Press, Champaign, IL, 1998, 178 pages, \$36.95.

Article I, section 8, of the US Constitution begins: "The Congress shall have the power" and continues, in clause 11, "to declare war. . . . " On its surface, the statement appears unambiguous. Why, then, has the United States actually declared war on so few occasions, particularly in contrast to the much more frequent use of military force abroad? Moreover, why has Congress abdicated this responsibility and the associated authority? These questions have nagged me for some time and is why I read this book. Hallett, an assistant professor at the Spark M. Matsunaga Institute for Peace at the University of Hawaii and a US Marine Corps platoon commander and staff officer in Vietnam, had similar qualms on this issue and does a superb job of answering my questions.

Explaining why declaring war has become a "lost art" only sets the conditions for Hallett's real goal, which he clearly states in the book's first sentence: "My purpose is to rethink the power to declare war." Rather than rehash the old debate of Executive versus Legislative powers, Hallett tackles the subject by examining the nature and purposes of a declaration of war. He concludes, convincingly, that the primary purposes are to articulate the reasons for resorting to war and its strategic aims. He fully examines these purposes by considering history, democratic theory and the role of the people's representatives.

This comprehensive treatment is the great strength of Hallett's work. He sets the stage for his prescription by neatly laying out what it means to have the power to declare war, from where that power is derived and why that power resides or should reside with the people's representatives in Congress.

Hallett "attempts to imagine ways in which the people's representatives might discharge their constitutional responsibility to declare war." In short, what he argues for, and provides a framework to achieve, is greater accountability.

MAJ Richard A. Harfst, USA, Fort Leavenworth, Kansas

Return to Table of Contents

2000 MacArthur Writing Competition Winners

The US Army Command and General Staff College is proud to announce this year's *Douglas MacArthur Military Leadership Writing Competition* winners.

1st Place: Major Fred Krawchuk

"Leadership Development: The Practices and

Embodiment of Thoughtful Action"

2nd Place: Major Linda C. Jantzen

"Taking Charge of Technology: A Leader's Guide

to the Information Age"

3rd Place: Major Jeffrey A. Bradford

"MacArthur, Inchon and the Art of Battle Command"

Each year the General Douglas MacArthur Foundation sponsors a writing competition open to all resident class members. The competition honors MacArthur and the precepts of "Duty, Honor, Country," by which he lived. Contest entries can address any aspect of military leadership.

The top three writers were recognized in a ceremony held 25 May 2000 and were awarded cash prizes of \$250 for first place, \$150 for second and \$75 for third place. In addition, each writer received a special edition of MacArthur's book *Reminiscences: General of the Army Douglas MacArthur*.

Letters

Photo Identification

I have just read the March-April 2000 issue of *Military Review* and, as usual, enjoyed it very much. I do, however, have one correction in an otherwise fine article ("Highway to Basra and the Ethics of Pursuit" by Stacy R. Obenhaus). The photo caption on page 53 identifies several M-8 armored cars as being from Combat Command A of the 7th Armored Division and as having been destroyed north of Poteau on 18 December 1944. The vehicles' front unit markings show them as being from the 18th Cavalry Reconnaissance Squadron of 1st Army. The 18th and its sister squadron were employed northeast of the area when the fight began. Much of both units' equipment was destroyed.

Combat Command A received the task of taking Poteau. It did so, was driven out, then retook the town from the 1st SS Panzer Grenadier Regiment. Combat Command R had earlier reported that the road beyond Poteau was terrifically jammed with vehicles of various units that had been in the area before the German offensive.

By 19 December 1944, the remnants of the 14th Cavalry Group, of which the 18th was part, formed into a provisional troop and began screening for Combat Command R to the north. This confirms that the vehicles in the photo were of the 18th Cavalry, as the markings indicate, and not Combat Command A, which fought back and forth in the area of Poteau.

GEN William A. Knowlton, USA, Retired, Arlington, Virginia

Editor's Note: MR regrets the error. We should have read the photo and not the original caption.

The Doctrinal Problem

Doctrine is a pressing problem for the US Army. Few soldiers study, understand, practice or are tested on doctrine, and few have a working knowledge of its vocabulary. Most soldiers would probably not consider this subject to be an issue and are fairly oblivious to its ramifications.

Over the last five years I have watched more than 70 brigades and their staffs in operation. I have visited the National Training Center (NTC) and the Joint Readiness Training Center (JRTC) as an observer of Active and Reserve Component rotations. I have participated in conferences either discussing key doctrine manuals or helping to write them. I have seen close up how the process works and who is writing doctrine.

A recent influx of new words can be traced directly to the NTC and JRTC. "Counterreconaissance" ranks among the most used and least understood words in our professional vocabulary. In US Army Field Manual 71-100, *Division Engineer Combat Operations*, counterreconnaissance is defined as a security operation. Although this is supposedly understood, we still talk about it as if it were a distinct and separate mission.

Although the term "penetration box" is now used in several contexts, officially the term does not exist. The closest word in doctrine is "breach." When I have pointed out the discrepancy, the response has

been, "That's what the commander wants to call it." Although commanders are good officers in positions of responsibility based on demonstrated performance, they cannot arbitrarily change or add to doctrine. A commander's staff has the responsibility to call this out to the commander's attention and recommend the correct word or term.

The Battle Command Training Program (BCTP) constantly finds a disconnect between the use of the words "seize" and "secure." The disconnect is primarily caused by not understanding definitions then inadvertently using one when meaning the other. "Defeat" and "destroy" also puzzle staffs and commanders. The artillery version of "destroy" (reduce by 30 percent) is not always the infantry, armor or aviation meaning. "Destroy" means different things to different branches; therefore, it would be wise to permanently resolve what it means across services.

At NTC, while discussing problems concerning doctrine, observers/controllers (OCs) told me their mission was not to teach doctrine. These captains and majors find themselves in a time-constrained environment where adhering to doctrine "would be great," but they have to get on with the "real" work. These officers are not slackers; they work long hours in a hostile environment. In the world's greatest training arena we do not allow time to train and sustain our staffs and commanders in our professional fundamentals.

At JRTC, highly motivated young officers also consider doctrine confining. They do not possess a firm understanding of basic doctrine. For example, one sincere captain had developed a decision-making system based on the results of targeting meetings. The results were noted on a matrix and became the next day's orders. The young soldier's system was clearly not based on the five paragraph operation order (OPORD). As another example, a senior OC said, during an after-action review, that the military decision-making process (MDMP) was a "good technique." The MDMP is not only a good technique; it is doctrine.

At the combat training centers (CTCs), the MDMP was routinely attacked as being too cumbersome, but neither the OCs nor the training staff actually understood the process. In particular, wargaming methods were not understood or routinely practiced. We justify the use of a single or "focused" course of action (COA) because "we do not have time" to develop others. The premise of a focused COA is based on combat requirements, a seasoned commander and a fully trained staff. Manuals should reflect that this type of focused COA should only be used in combat. Except in unusual circumstances, NTC and JRTC are not the correct environment in which to use focused COAs.

Training units have an almost overwhelming urge to use matrix orders, and OCs are reluctant to prohibit their use. Using current doctrine should be nonnegotiable at the CTCs. The argument about time is valid, but if we cannot practice doctrine at the CTCs, where do we practice?

Recently I explained to a Command and General Staff College (CGSC) graduate that a brigade's cross-FLOT (forward line of own troops) air assault was not a deep attack. Another recent graduate could not be moved from the belief that once a commander designates a main effort it could not be shifted to another unit. I might have had the misfortune to encounter the only two majors who did not understand tactics fundamentals, but I do not believe so.

What should we do? There should be comprehensive exams on doctrine beginning in the basic courses and continuing through CGSC. At each level, students should be required to demonstrate a grasp of basic doctrine and a clear understanding of definitions and important terms. A CGSC graduate should be a

doctrine and tactics expert. A graduate not in the combat arms should also display a similar grasp of combat support or combat service support doctrine. This testing might strain students, but the gain would easily outweigh the cost.

We should teach doctrine at the CTCs and demand it be followed with regard to OPORD format using the MDMP. These great training assets should stress Army standards so we can all understand any order any headquarters issues. To ensure that correct, current doctrine is taught and enforced in all training environments, the Army should require each school or agency to visit and assess sites where doctrine is used.

The solution is fairly straightforward—devote ourselves to an appropriate study of doctrine, not just briefly flipping through the manuals before a CTC rotation or a warfighter exercise.

LTC Jack E. Mundstock, USA, 28th Field Training Group, Fort Meade, Maryland

Marshall Myth Revisited

I appreciate LTC Albert N. Gar-land's comments in the "Letters" section of the MayJune 2000 issue of *Military Review*, about my article "Harnessing Thunderbolts" (January February 2000). However, he has taken me to task unfairly in certain areas because of his lack of information regarding my use of S.L.A. Marshall's observations on the battlefield behavior of soldiers during World War II and the Korean War. My rather brief mention of Marshall's findings is supplemented by my own substantial research in this area and corroborated by information other than Marshall's own. The remark was meant to provide some recognizable, if controversial, support for my overall argument that postWorld War II improvements to control soldiers during combat are still evident today.

I largely agree with Garland's comments regarding Marshall's suspect methodology. I, my peers and fellow West Point instructors are fully aware of recent literature, appearing in a variety of forums, that effectively debunks Marshall's methodology. I agree that Marshall's data were not properly obtained in the scientific sense. Garland should rest knowing that US Military Academy cadets are not required to spout *Men Against Fire* dogma before graduating.

MAJ Kelly C. Jordan, USA, 2d Infantry Division, Republic of Korea

Return to Table of Contents

CGSC Notes

DJMO Outreach

Lieutenant Commander John Pritchett recently completed training with the National Foreign Affairs Training Center, Washington, DC, on Sub-Saharan Africa Area Studies. The course, a wide-ranging, intensive introduction to Sub-Saharan Africa, prepares foreign affairs professionals for assignment to the region. Pritchett's training will enhance his Advanced Program Elective A562: Africa Strategic Studies. While in Washington, Pritchett also served as the State Chairperson to the National Summit on Africa.

Chaplain Major Chet Lanious recently attended the Combined Humanitarian Assistance Response Training (CHART) Course at Fort Sam Houston, Texas. The course provides a comprehensive view of Humanitarian Assistance Operations issues and key planning considerations necessary for appropriate military support. The Department of Joint Operations (DJMO) instructs "Humanitarian Assistance Operations" and sponsors a CHART course for Term IV.

As a subject matter expert, Robert Walz, Strategic Studies Division, recently visited the Department of State, National Security Center, Department of Defense, Central Intelligence Agency and Congress. Such visits keep the Strategic Studies Division current on national security issues and contributes immeasurably to the department's strategist program.

In March, James Willbanks, Joint Operations Division, presented a paper, "US Advisors, 1969-1973: Vietnamizing the War," at the Southwestern Social Science Association 2000 Annual Meeting in Galveston, Texas. He also presented "The Final Battle, Xuan Loc 1975," to the Popular Culture Association Conference, in New Orleans, Louisiana, in April.

DJMO recently completed its pilot program of combined training with the USACGSC and the Australian Command and Staff College. The program, approved and supported by TRADOC and PACOM, involved a series of video teleconferences linkups to discuss strategic issues and included a visit to exercise *PRAIRIE WARRIOR* by the Australian students. The program has enhanced long-term ties between the colleges and models successful combined and multinational training.

SCP and Transformation

The School for Command Preparation (SCP) continues to meet the needs of tactical battalion/brigade commanders as part of the US Army's transformation. Recent successful changes include the incorporation of adaptive-thinking methodology, an increased focus on decision making, improved relevance to commanders supporting corps/division operations and im-plementation of military operations on urbanized terrain (MOUT) tactical exercise without troops (TEWT) in Lawrence, Kansas. Changes also include the Army Research Institute's "Think Like a Commander" vignettes and "Duffer's Drift" scenarios. The vignettes are designed to help brigade commanders, and the scenarios provide iterative, progressive lessons on decision making. Future enhancements will include collaboration with the combat training centers to provide a tactical-applications TEWT. Address any comments on precommand programs to LTC George Hodge, (913) 758-3379 or DSN 585-3379.

CSI Review Research

and Recognition

In April, the Combat Studies Institute (CSI) underwent an external review by a team composed of General (Retired) Donn A. Starry, James Stensvaag (TRADOC Historian), Jeff Clarke (Chief Historian, CMH), Roger Spiller (USACGSC Marshall Chair) and Linda Frey (a member of CSA's Historical Advisory Committee). The review was to determine whether CSI's missions are still current. The team's recommendations are pending General John Abram's review and decision.

Under a research grant from the US Institute of Peace, Robert Baumann, George Gawrych and Lieutenant Colonel (Retired) Walter Kretchik went to Sarajevo to research US Army peacekeeping activities. Ultimately, their work will result in a CSI research study or Leavenworth Paper.

Michael Pearlman delivered a presentation titled "The Atomic Bombing of Hiroshima and Nagasaki" at Northern Kentucky University. From 13-15 April, Baumann participated as a panelist in a seminar at the Association for the Study of Nationalities in New York City. Gary Bjorge and Baumann attended the Society for Military Historians conference at Quantico, Virginia, from 28-30 April. Bjorge delivered a paper titled "The Chinese Historians' View of the Korean War," and Baumann was a discussion panelist.

SAMS Historian Honored

Robert H. Berlin, School of Advanced Military Studies, was recently named executive director of the Society for Military History (SMH). The SMH holds annual conferences and publishes the quarterly *Journal of Military History* through the George C. Marshall Foundation and The Virginia Military Institute. Berlin can be reached by phone at (913) 758-3322 or by E-mail at

leavenworth.army.mil>.

Return to Table of Contents